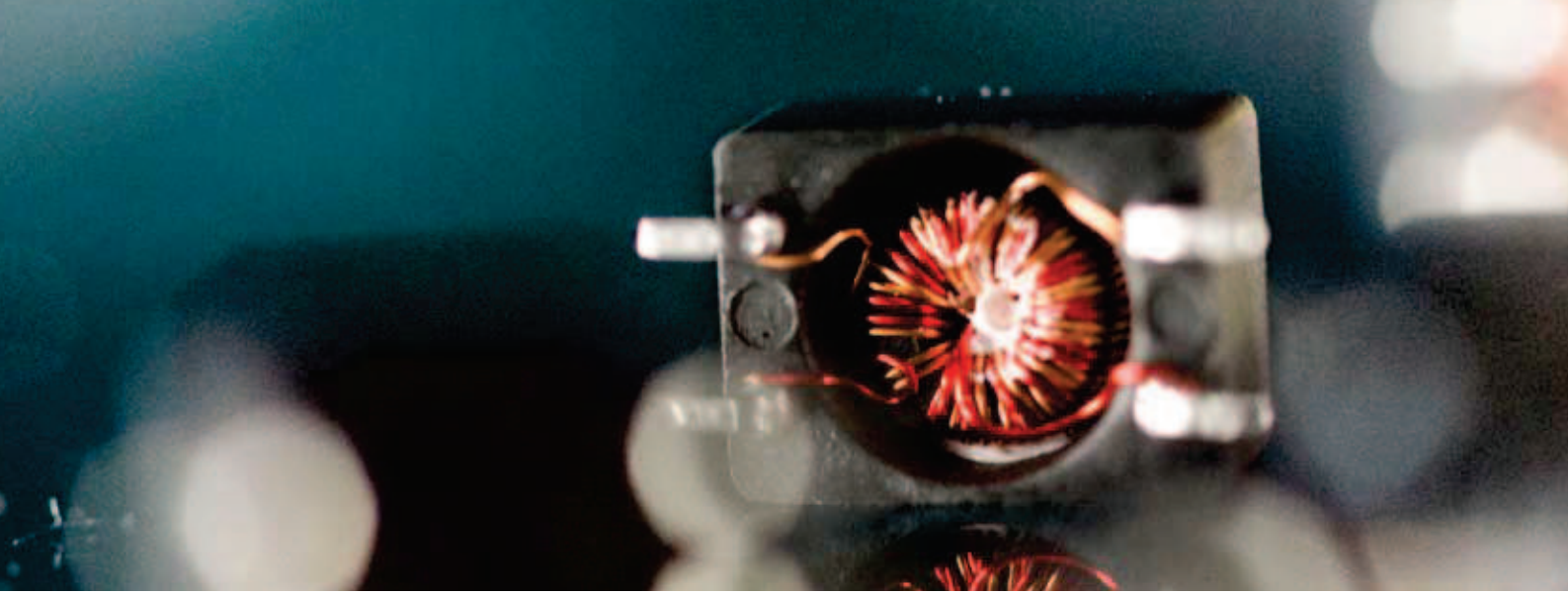
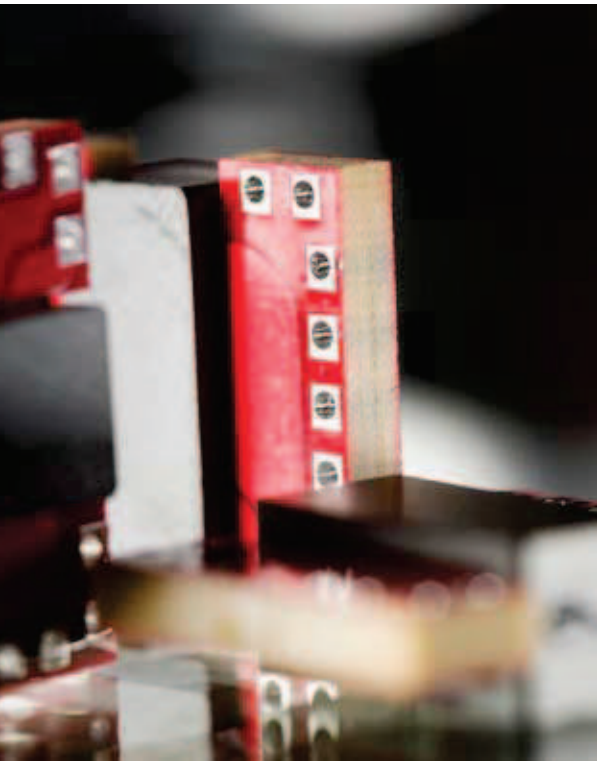
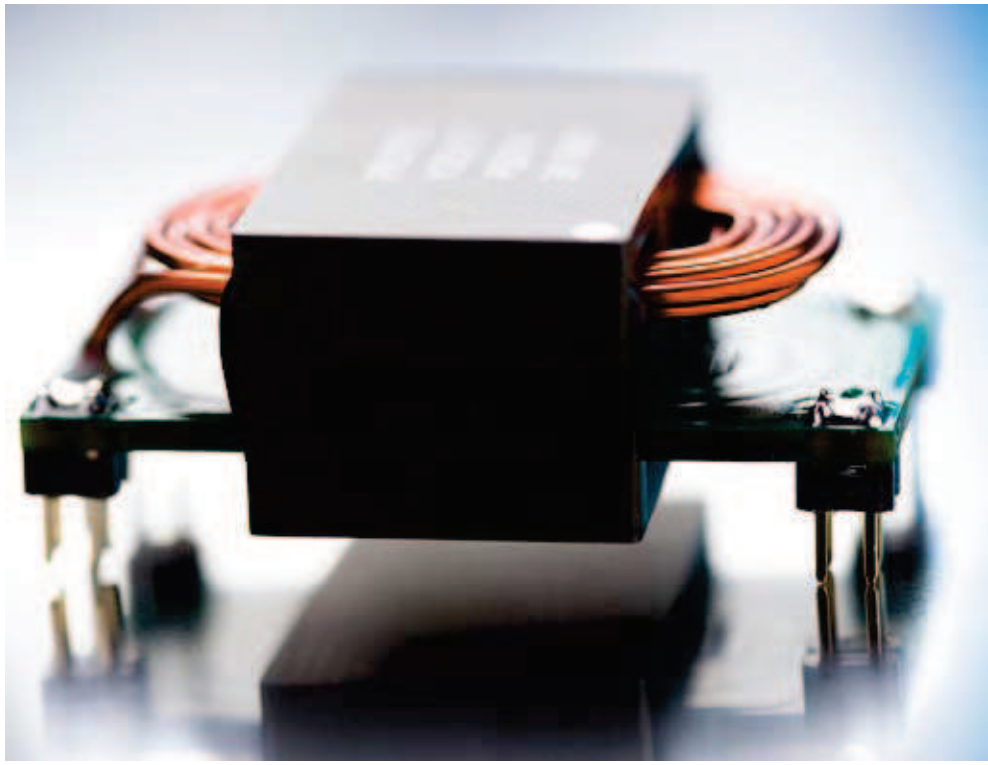


Innovative supplier of inductive components





ETAL
A COMPANY WITHIN ELEKTRONIKGRUPPEN

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Pb RoHS COMPLIANT

General Notes: Most ETAL components are compliant with RoHS Directive 2002/95/EC, and are suitable for Pb-free and conventional placement and reflow. Dimensions shown are in millimetres.

This catalogue is intended to be a general guide of our products, for specific technical specifications please refer to the individual datasheets.

ETAL operate a policy of continuous improvement and although every care has been taken to ensure the details in this catalogue were correct at the time of print, please appreciate that we must reserve the right to alter details or specifications at any time.

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ETAL
A COMPANY WITHIN ELEKTRONIKGRUPPEN

Innovative supplier of inductive components

The ETAL Group

A leading supplier of inductive components for the telecom, automotive and electronics industry.

The Group's customer base encompasses a wide range of electronic equipment producers including telecommunications systems suppliers and network terminal manufacturers. The Group has units in Sweden, Finland, UK and China that provide design and sales support. Manufacturing is principally carried out in Sri Lanka, China, Estonia and the UK.

Quality

All ETAL units hold ISO 9001 accreditation and provide first class service and customer satisfaction with respect to performance, reliability, quality, support, value for money and timely delivery of the goods and services. With a policy of continual improvement the Quality Management Systems provide a structured framework within which ETAL works to fulfil customer needs rather than offering prescriptive solutions to problems. The company has an environmental plan and some factories are already certified according to ISO14001.

ETAL is an approved supplier of products requiring UL accreditation.

Custom and Standard products

ETAL's products typically fall into two categories, custom and standard portfolio products. With custom products, the client typically defines the product specifications used to design the component. An important feature of this service is fast prototyping, working in partnership to meet the specifications and performance along with extensive customer support. ETAL is involved in custom projects both at the design stage and when there is a need for a competitive and reliable second-source or improved system performance at a lower cost. Custom components are supplied to telecommunications systems suppliers, manufacturers of power supply units and various industrial applications.

ETAL also provides specialized transformers in small batches for military and healthcare applications. Typical construction characteristics of these transformers include large EFD, ETD, PQ, toroids, planars, transformers containing thicker foils, printed circuit boards and litz wire and products with dipping, vacuum impregnation and encapsulation.

ETAL's range of standard components are designed for use in a wide range of applications and are marketed under the ETAL brand, which is well established and highly regarded. Principal uses for standard products include Modem applications, Internet Terminals, Set-top boxes, Fax machines, Voice-over-IP equipment, Voice recording, Powerline devices and Payment terminals. A complete product family for xDSL applications is available. Additionally, the range of standard components includes E1/T1, ISDN 'U' interface transformers and power inductors.

Strong ownership

ETAL Group is part of ElektronikGruppen BK AB, a Swedish company whose share has been quoted on the OMX Nordic Exchange Stockholm since 1985, and which is one of the Nordic region's leading suppliers of high-tech electronic components, systems and production equipment for the electronics industry. ElektronikGruppen conducts operations in ten countries through three business areas. ETAL belongs to the EG Products business area, which conducts in-house development and production of inductive components and fiberoptics.

For more information, please see www.egruppen.com.

Award-winning product development

ETAL has R&D functions in Sweden, Finland, UK as well as China. In Sweden, Finland and China the focus is on custom components, while the UK unit is responsible for developing standard products. The Group holds numerous patents related to its products and has also received the Queen's Award for Technological Achievement in the UK.

Worldwide distribution

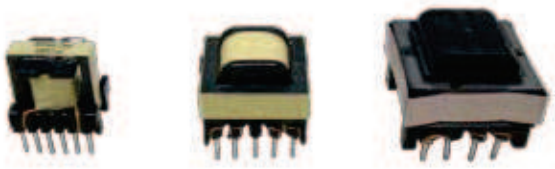
ETAL operates a worldwide distribution network covering Europe, North America, Australasia and key countries in Asia. These distribution partners assist ETAL's in-house sales department and support our customers' designers and buyers.

Customized transformers

This brochure illustrates the most popular transformer types supplied by ETAL.
For each category, different ferrite grades, AL-values, coil formers and turns ratios can be provided to suit the transformer to the customer's application.

E-EF Magnetics

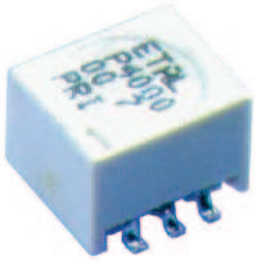
E-EF types are suitable for different kinds of applications. They can work up to 500 kHz with high saturation materials and low core losses. Typical applications are power applications, pulse transformers, ignition transformers, power chokes. The core size ranges from E8.8 to E65.

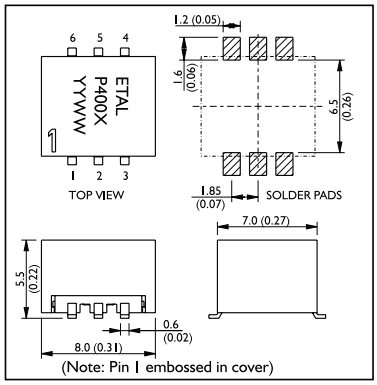


Miniature E-Magnetics

Miniature E cores in SMD versions offer extremely small footprint and low profile. They are used typically as line interface transformers (e.g. 2 Mbit/s), xDSL inductors, or in current sensing and power supply applications. On miniature E cores, ETAL offers:

- E 5.3/5.5
- E 6.3

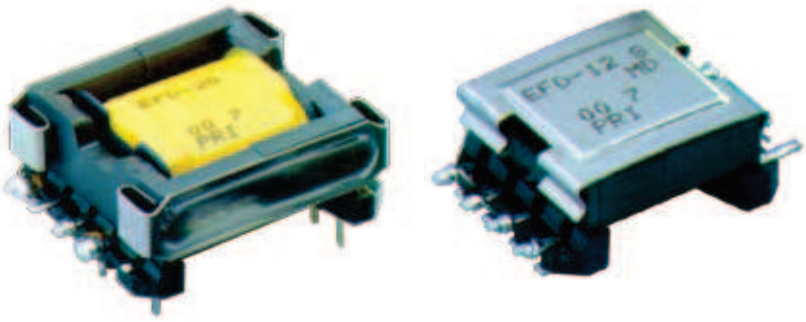




EFD-Magnetics

EFD types are popular due to their low-profile design. They are typically used as transformers in AC/DC power supply applications with several topologies, DC/DC converters, pulse transformers, inductors or common mode chokes, or as line interface transformers. ETAL can provide the following types as standard constructions (SMD or through-hole):

- EFD-10
- EFD-12
- EFD-15
- EFD-20
- EFD-25
- EFD-30

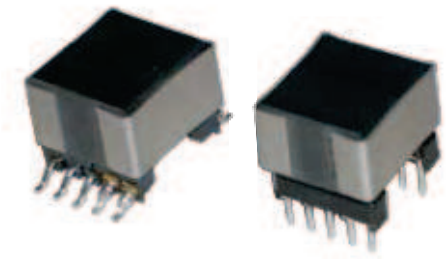


Pb RoHS

EP-Magnetics

EP types offer small footprint and magnetically shielded winding. They are typically used in xDSL applications, telecom line interfaces, or as inductors and common mode chokes. Depending on the format they are available for SMD or through-hole insertion. ETAL specializes in:

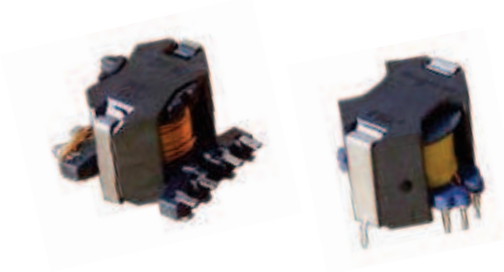
- EP-5
- EP-7
- EP-10
- EP-13



RM-Magnetics

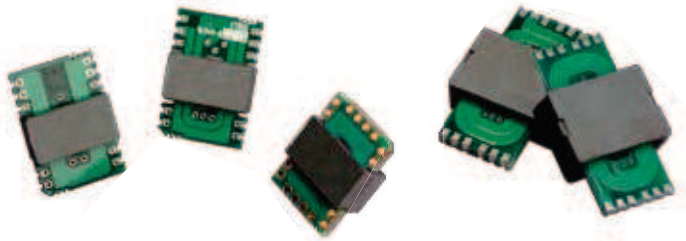
The RM format is a widely known compact construction suitable for high density integration on PCBs. RM-magnetics are mainly used in telecom and ISDN line interfaces, power supply applications, inductors and filters. ETAL specializes in the following types (SMD or through-hole):

- RM-4
- RM-4 low profile
- RM-5
- RM-6
- RM-7
- RM-8
- RM-10
- RM-12
- RM-14



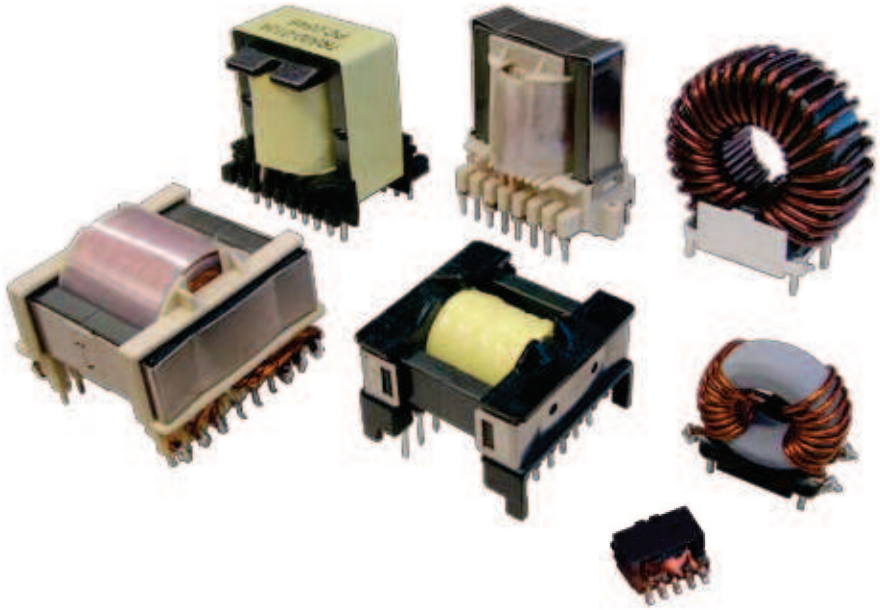
Planar Transformers

Planar transformers are the latest constructions to be used in power supply applications, mainly due to their low profile, high efficiency and stable electric values. Advantages of planar technology when compared to conventional construction are e.g. low profile, low weight, very low leakage inductance, low losses and low interwinding capacitances. ETAL has specialized in planars with power range up to 300 W, PCB layers up to 16 and ferrite core shapes according to customer's needs.



Other Ferrite Transformers

On request, ETAL can provide magnetics based on other core sizes and core types such as ER, ETD, PQ, Rod and Toroid. Please advise your requirements through your local ETAL distributor or representative, or contact any of the ETAL sales offices.



Pb RoHS

Through Hole Encapsulated Line Transformer

Part Number	Modem Standard	Data Rate kbps	Frequency Response LF Hz max	Frequency Response HF kHz min	Flatness ±dB max	Return Loss dB min	Isolation kV DC min	Sum of winding resistance Ω	Max dimensions L x W x H
P1165	V.32bis	14.4	30 (typ)	15 (typ)	0.2	18	5.5	120 (typ)	19.5x15.2x11
P1200	V.32bis	14.4	50	10	0.2	18	5.5	134 (typ)	18x18x12.6
P2001	V.34+	33.6	50	10	0.2	18	5.5	146 (typ)	18x18x12.6
P2602	V.32bis (with tap)	14.4	50	10	0.2	18	5.5	134 (typ)	18x18x12.6
P3034	V.34+	33.6	50	10	0.2	18	5.5	134 (typ)	18x18x12.6
P3065	V.34	33.6	30 (typ)	15 (typ)	0.2	16	5.5	190 (typ)	19.5x15.2x11
P3126	V.32bis	14.4	50	10	0.2	18	5.5	134 (typ)	18x18x12.6
P3146	V.92	56	10	6	0.6	16	5.5	200 (typ)	18x18x12.6
P3156	V.92	56	10	8	0.2	14	5.5	280 (typ)	19.5x15.2x11
P3176	V.92	56	10	6	0.6	16	5.5	200 (typ)	18x18x12.6
P3357	V.92	56	10	55	0.1	16	3.0	186 (typ)	18x18x12.6
P5059	V.92	56	10	60	0.1	16	3.0	194 (typ)	17.8x17.8x11.8

Through Hole Unencapsulated Line Transformer

Part Number	Modem Standard	Data Rate kbps	Frequency Response LF Hz max	Frequency Response HF kHz min	Flatness ±dB max	Return Loss dB min	Isolation kV DC min	Primary winding resistance Ω	Secondary winding resistance Ω	Max dimensions L x W x H
P3189	V.22bis+voice	2.4			0.2	18	3	69	69	18x18x12.7
P3303	Legerity SLAC (5V)	2.4	30 (typ)	90 (typ)	0.1	20	3	38	53	18x18x12.7
P3304	Legerity SLAC (3.3V)	2.4	30 (typ)	90 (typ)	0.1	20	3	38	25	18x18x12.7
P3324	V.22bis+voice	2.4	30 (typ)	55 (typ)	0.1	16	3	78	108	18x18x12.7
P3356	V.92	56	10 (typ)	55 (typ)	0.1	16	3	78	108	18x18x12.7
P5011	V.34, V.90, V.92	56	10 (typ)	30 (typ)	0.1	20	3	135	130	18.1x17.6x11.2
P5056	V.92	56	10 (typ)	60 (typ)	0.1	20	3	103	98	18.1x17.6x11.2
P5097	V.34, V.90, V.92	56	10 (typ)	30 (typ)	0.1	20	3	135	130	18.1x17.6x11.2
P5100	V.32bis	14.4			0.2	18	3	67	67	18.1x17.6x11.2
P5122	V.22bis+voice	2.4			0.2	18	3	69	69	18.1x17.6x11.2
P5233	V.92	56	10 (typ)	60 (typ)	0.1	16	3	96	93	17.5x16.5x10.4
P5273	V.34, V.90, V.92	56	10 (typ)	30 (typ)	0.1	20	3	135	130	17.5x16.5x10.4

Surface Mount Line Transformer

Part Number	Modem Standard	Data Rate kbps	Frequency Response LF Hz max	Frequency Response HF kHz min	Flatness ±dB max	Return Loss dB min	Isolation kV DC min	Primary winding resistance Ω	Secondary winding resistance Ω	Max dimensions L x W x H
P2781	V.32bis	14.4	50 (typ)	40 (typ)	0.2	18	5.5	112	112	13x9x7
P2782	V.32bis	14.4	50 (typ)	40 (typ)	0.2	18	5.5	112	56+56	13x9x7
P3000	V.92 2-4 wire hybrid	56			0.1	17	5.5			18x12.7x7
P3081	V.34+	33.6	50 (typ)	30 (typ)	0.2	16	5.5	170	170	13x9x7
P3181	V.92	56			0.2	16	5.5	225	250	13x9x7
P3188	V.22bis	2.4			0.2	18	5.5	94	94	13x9x7
P3191	V.34+	33.6	50 (typ)	35 (typ)	0.2	16	5.5	151	151	13x9x7

High Impedance 'Pick Off' Transformer

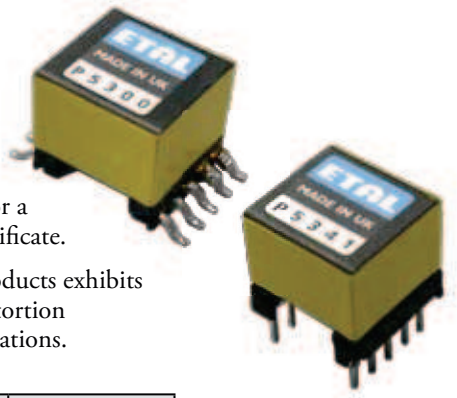
Part Number	Pin/SMD	Turns Ratio	Impedance ratio	Input impedance kΩ	Leakage inductance mH	Shunt inductance Lp H	Shunt loss Rp kΩ	Isolation kV DC min	Sum of windings DCR (Ω)	Max dimensions L x W x H
P1727	TH	2.162	4.67:1	12	160 (max)	22 (min)	50 (min)	5.5	1537 (max)	18x18x12.6
P2152	TH	1.732	3:1	50	330 (typ)	150 (typ)	300 (typ)	5.5	2550 (typ)	18x18x12.6
P2769	SMD	2.162 (1:1)	1:1	30	67 (typ)	30 (typ)	110 (typ)	5.5	3300 (typ)	13x9x7
P3127	TH	1.732	3:1	20	170 (typ)	53 (typ)	70 (min)	5.5	1860 (max)	18,5x18,5x14.6
P3190	SMD	2.162 (1:1)	1:1	10	20 (typ)	11 (typ)	44 (typ)	5.5	968 (typ)	13x9x7

Planar Power Transformer

Part Number	Pin/ SMD	Turn Ratio	Pri DCR mΩ	Sec DCR mΩ	Aux DCR mΩ	Leakage inductance nH	Primary inductance Lp µH	Frequency	Total loss Watt	Isolation Vrms min	Max dimensions L x W x H
P6130	SMD	8:2+2	68	9.2	N/A	0.09	78.1	10-150kHz	0.5	750	13.7x11x4.9
P6131	SMD	12:2+2	100	9.0	N/A	0.25	175.68	10-150kHz	0.5	750	13.7x11x4.9
P6132	SMD	8:1+1	68	2.3	N/A	0.2	78.1	10-150kHz	0.5	750	13.7x11x4.9
P6133	SMD	11:1+1	90	2.3	N/A	0.35	147.6	10-150kHz	0.5	750	13.7x11x4.9
P6134	SMD	9:1+1	88	2.3	N/A	0.2	98.82	10-150kHz	0.5	750	13.7x11x4.9
P6135	SMD	8:3+3	68	20	N/A	0.09	78.1	10-150kHz	0.5	750	13.7x11x4.9
P6140-1	SMD	3:1	16	4.5	70	100	2.25	100-350kHz	0.6	500	25x18x6
P6140-2	SMD	3:1	16	4.5	70	100	2.84	350-500kHz	0.6	500	25x18x6
P6141	SMD	3:2CT	20	7.5	N/A	100	25	100-500kHz	0.7	500	25x18x6
P6142-1	SMD	7:1	7	4.5	70	100	1.0	350-500kHz	0.6	500	25x18x6
P6142-2	SMD	7:1	7	4.5	70	100	1.26	100-350kHz	0.6	500	25x18x6

Pb RoHS

ADSL Transformers



Typical applications for our xDSL low distortion series is ADSL over POTS with multiple brands of chipsets, even combined with ISDN. Products have Industry Standard Footprint and are certified to IEC 60950 for supplementary insulation for a primary circuit, 250V working voltage, and are supported by an IEC CB Test Certificate.

The safety system yields very low transformer parasitics, ensuring that our DSL products exhibits excellent frequency response and balance, in combination with good harmonic distortion performance. The product range is ideally suited to low cost yet demanding applications.

Part Number	Pin/SMD	Turns Ratio	Primary Inductance	Leakage inductance (max)	Isolation kV DC min	Max dimensions L x W x H
P5300	SMD	2.0	0.4 mH	6.5 uH	3.0	17.15x12.9x12.2
P5341	TH	2.0	1.5 mH	14 uH	3.0	13.6x14.0x13.4
P5342	TH	2.0	0.4 mH	8 uH	3.0	13.6x14.0x13.4

Powerline Carrier Isolation Transformers P2820, P2821, P2822, P2823, P2824

The family of transformers P2820, P2821, P2822, P2823 and P2824 is specifically designed to provide signal coupling with safety for Powerline Carrier applications over four bands from 40kHz to 148.5kHz.

Typically, the devices are driven from low-impedance sources and are connected to the main network using capacitors whose values are chosen to resonate with the transformer leakage inductance. They are particularly suitable for use with tri-state power amplifiers, e.g. Texas Instruments TLE2301.

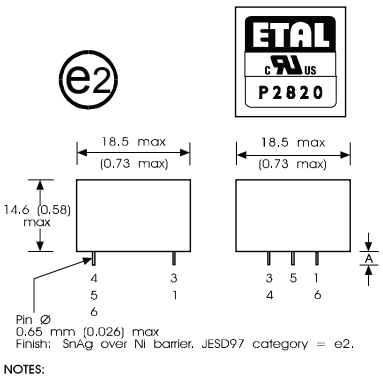
Summary Specification

Typical lumped parameters as equivalent circuit pins 1-3.

Parameter	Condition	P2820	P2821	P2822	P2823	P2824	Units
Series resistance R_S (DCR+ AC resistance)	1V 100kHz	0.5	0.6	1.0	1.3	1.3	Ω
Leakage inductance ΔL	1V 100kHz	14.4	22	46	58	46	µH
Shunt inductance Lp	1V 100kHz	400	600	1200	1600	1200	µH
Shunt loss Rp	1V 100kHz	>20	>20	>20	>20	50*	kΩ
Turns ratio, N	1V 100kHz	1.67	3.22	3.15	3.00	1.00	

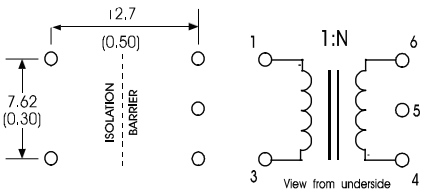
* P2824 shunt loss: Condition 1V 125kHz

Dimensions



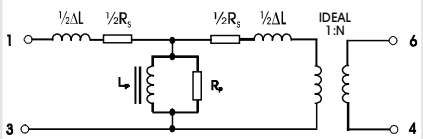
NOTES:
Dimension "A" : 3.0 to 3.5 mm (0.118 - 0.138)

Connections



Tolerance ±0.3 mm (±0.012 inch)
Recommended PCB hole size 1 mm Ø (0.04 inch)

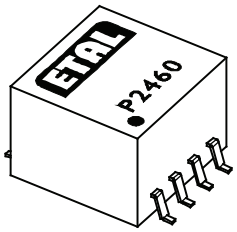
Equivalent Circuit



At T = 25ºC

RoHS

High Voltage Isolation DC-DC Converter Transformer P2460



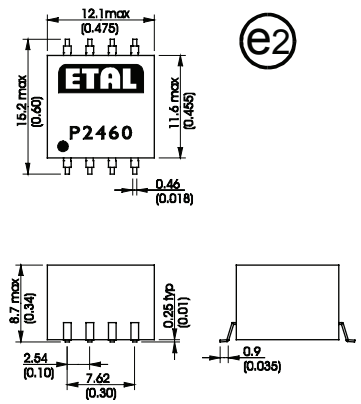
P2460 is a high voltage isolation transformer for use with low power DC-DC converter circuits. Designed specifically for 5V to 5V applications up to 1W using Maxim MAX253 and MAX845, P2460 provides reinforced insulation to safety standards IEC 60950, EN 60950 and UL 60950 at a working voltage of 250Vrms, and operates over a wide temperature range -40ºC to +85ºC. P2460 is compliant with RoHS Directive 2002/95/EC, and suitable for lead-free and conventional placement and reflow.

Summary Specification

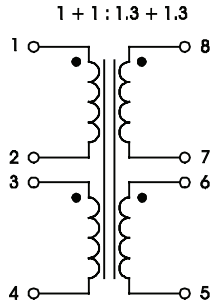
Values at T = 25ºC, unless otherwise stated.

Parameter	Conditions	Min	Typ	Max	Units
Primary Inductance	100kHz 250mV 1-4 (link 2-3)	320	500	-	µH
Turns ratio	8-5 (link 6-7) : 1-4 (link 2-3)	-	1.3	-	-
DC resistance	1-2, 3-4 5-6, 7-8	- -	- -	0.5 0.5	Ω Ω
ET product	1-2, 3-4	18	-	-	Vµs
Dielectric strength	Pri : sec	4500	-	-	Vrms
Operating range	Ambient temperature	-40	-	+85	ºC

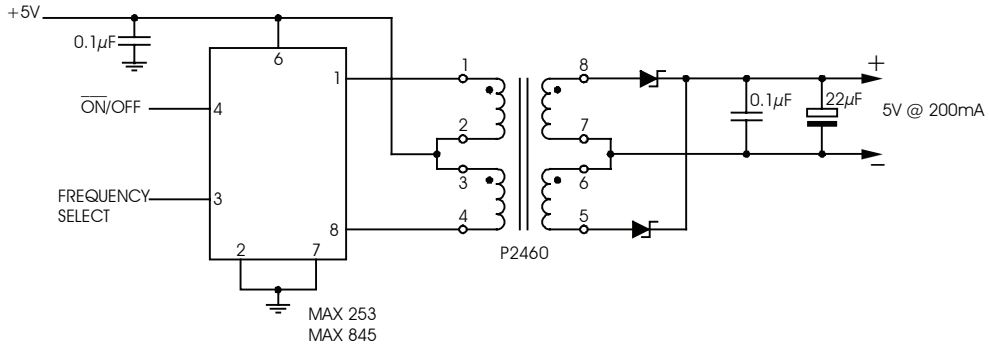
Dimensions



Connections

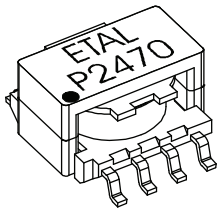


Typical applications



RoHS

DC-DC Full Bridge Transformer P2470

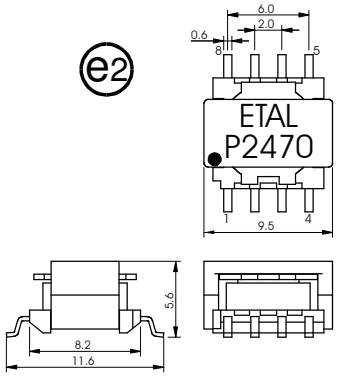


P2470 is an isolation transformer for use with LTC1535, MAX3535E and MXL1535E isolated RS-485 transceivers. P2470 is compliant with RoHS Directive 2002/95/EC, and suitable for lead-free and conventional placement and reflow.

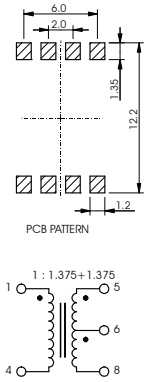
Summary Specification

Parameter	Conditions	Min	Typ	Max	Units
Primary Inductance	1-4, 100kHz 250mV	382	500	711	µH
Turns ratio	1-4 : 5-6 : 6-8	-	1.0 : 1.375 : 1.375	-	-
DC resistance	1-4 5-8	- -	- -	0.62 2.5	Ω Ω
Dielectric strength	Pri : sec, pri : core Sec : core	1250 500	-	-	Vrms Vdc
Operating range	Ambient temperature	-40	-	+85	ºC

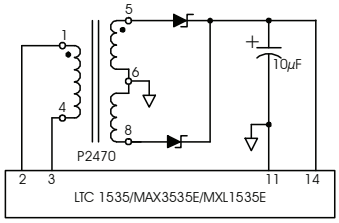
Dimensions



Connections

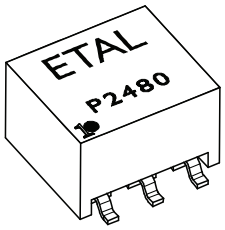


Typical application



RoHS

DC-DC Converter Transformer P2480

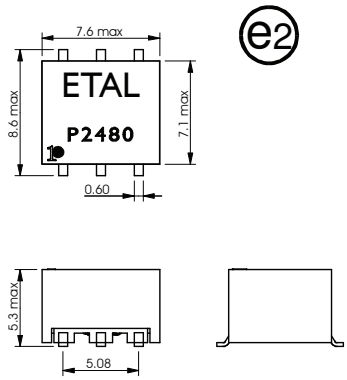


P2480 is a voltage isolation transformer for use with low power DC-DC converter circuits. P2480 is designed for applications using Maxim MAX253 and MAX845, and operates over a wide temperature range -40ºC to +85ºC. P2480 is compliant with RoHS Directive 2002/95/EC, and suitable for lead-free and conventional placement and reflow.

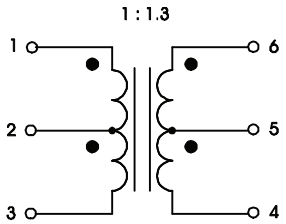
Summary Specification

Parameter	Conditions	Min	Typ	Max	Units
Primary Inductance	10kHz 250mV 1-3	400	-	-	µH
Turns ratio	6-4 CT : 1-3 CT	-	1.3	-	-
DC resistance	1-3 6-4	- -	- -	0.95 1.25	Ω Ω
ET product	1-3	-	27	-	Vµs
Dielectric strength	Pri : sec	1500	-	-	Vrms
Operating range	Ambient temperature	-40	-	+85	ºC

Dimensions



Connections



RoHS

10 Amp Current Sense Transformer P407

The P407 family is intended for measuring instantaneous current in switching applications. By using a current transformer to mirror current, the need for a sense resistor, with its associated power losses, is avoided.

P407 has a current ratio of 70:1 and is suitable for sense currents up to 10A and switching frequencies in the range 50kHz to 1MHz. Four variants are available to suit different pinouts and phasing.

Functional insulation is provided between primary (sense) and secondary windings to insulation Class B (130ºC).

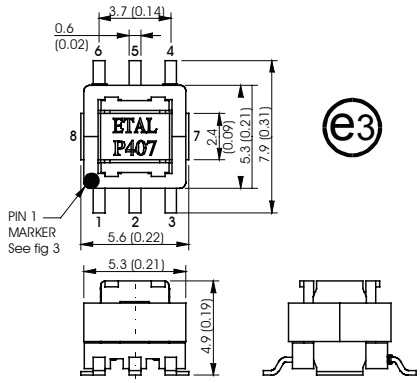
Specifications

Electrical. At T = 25 °C, unless otherwise stated.

Parameter	Conditions	Min	Typ	Max	Units
Turns Ratio, N		—	70	—	—
Secondary Inductance	10kHz, 250mV	980	—	—	µH
Primary DC resistance		—	0.6	0.8	mΩ
Secondary DC resistance		—	3.5	4.75	Ω
Voltage isolation	50Hz	500	—	—	Vrms
Operating range: Functional Storage	Ambient temperature	 -25 -40	 — —	 +105 +125	 °C °C

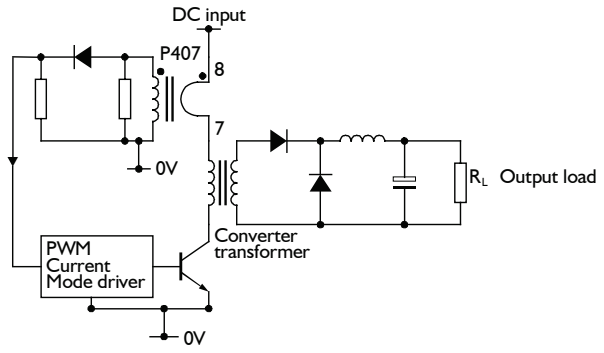
Other turns ratios can be supplied.
Please contact ETAL Technologies with your requirements.

P407 dimensions

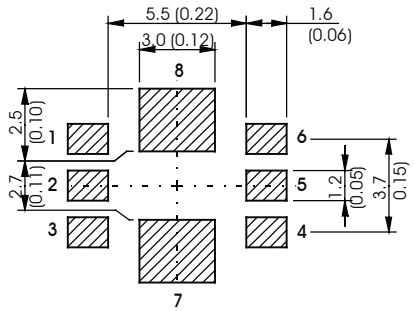


Terminals pure tin (Sn). JESD97 category = e3.

P407 Typical application



P407 PCB pattern

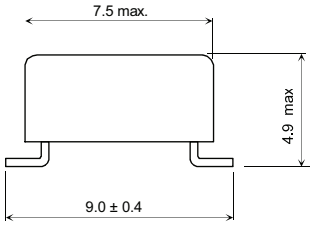


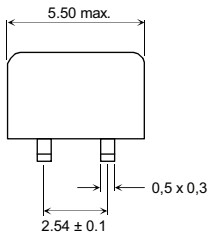
Pb RoHS

CAN BUS CHOKE 2824TFxxxxSCLF Series

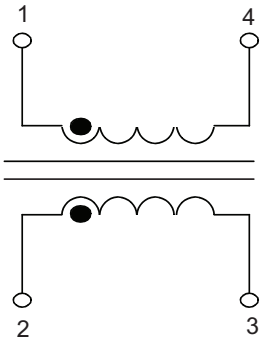
CAN BUS common mode choke series 5 - 4700 µH

L [µH]	Type no.	Marking	Ordering code
5	2824TF0053SCLF	0053SCLF	191004
11	2824TF0113SCLF	0113SCLF	191010
25	2824TF0253SCLF	0253SCLF	191017
51	2824TF0513SCLF	0513SCLF	191025
470	2824TF4703SCLF	4703SCLF	191029
1000	2824TF1004SCLF	1004SCLF	191034
2200	2824TF2204SCLF	2204SCLF	191040
4700	2824TF4704SCLF	4704SCLF	191045

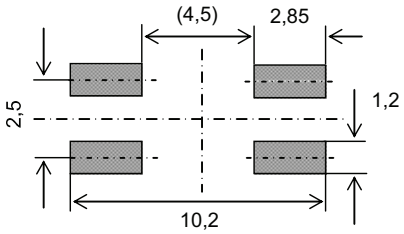


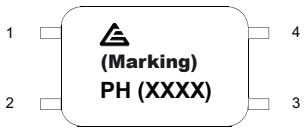


Winding diagram



Footprint (mm)





RoHS

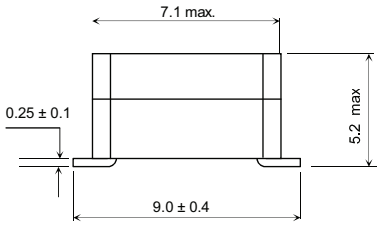
Test:	Pin:	TF0053SCLF min	TF0053SCLF typ	TF0053SCLF max	TF0113SCLF min	TF0113SCLF typ	TF0113SCLF max	TF0253SCLF min	TF0253SCLF typ	TF0253SCLF max	TF0513SCLF min	TF0513SCLF typ	TF0513SCLF max	TF4703SCLF min	TF4703SCLF typ	TF4703SCLF max	Unit:	Condition
Inductance:	1-4 / 2-3	3,5	5.00	6,5	7,7	11.00	14,3	17,5	25.00	32,5	35,7	51.00	66,3	329	470	611	µH	@ 100kHz / 10mV
Leakage inductance:	1-4 (s 2-3)			0.065			0.065			1.5			2.6			0.26	µH	@ 100kHz / 10mV
DC Resistance:	1-4 / 2-3			0.13			0.156		0.13				0.3			0.325	Ω	
TRP:	1-4 / 2-3		1 : 1 +/– 5%			1 : 1 +/– 5%			1 : 1 +/– 5%			1 : 1 +/– 5%			1 : 1 +/– 5%			@ 100kHz / 10mV
Hi-pot	wdg - wdg		500			250			250			250			750		VAC	0,50mA, 2 sec
Idc			1200			800			800			800			700		mA	
CM Insertion loss @ Condition	1-4 (s1-2/4-3)		-14 200 MHz			-20 100 MHz			-26 70 MHz			-25 100 MHz			-28 20 MHz		dB	

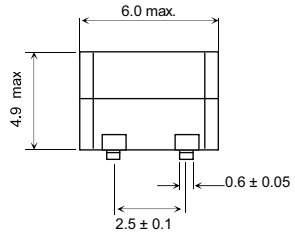
Test:	Pin:	TF1004SCLF min	TF1004SCLF typ	TF1004SCLF max	Unit:	Condition	TF2204SCLF min	TF2204SCLF typ	TF2204SCLF max	TF4704SCLF min	TF4704SCLF typ	TF4704SCLF max	Unit:	Condition
Inductance:	1-4 / 2-3	0,7	1.00	1,5	mH	@ 100kHz / 10mV	1,54	2.2	3,3	3,29	4.7	7,05	mH	@ 10kHz / 10mV
Leakage inductance:	1-4 (s 2-3)			0.26	µH	@ 100kHz / 10mV			0.325			0.5	µH	@ 10kHz / 10mV
DC Resistance:	1-4 / 2-3			0.26	Ω				0.52			1.3	Ω	
TRP:	1-4 / 2-3		1 : 1 +/– 5%			@ 100kHz / 10mV		1 : 1 +/– 5%			1 : 1 +/– 5%			@ 10kHz / 10mV
Hi-pot	wdg - wdg		750		VAC	0,50mA, 2 sec		750			750		VAC	0,50mA, 2 sec
Idc			700		mA			500			400		mA	
CM Insertion loss	1-4 (s1-2/4-3)		-33 6 MHz		dB			-36 3 MHz			-40 1.5 MHz		dB	

CAN BUS CHOKE 2824TFxxxxSTLF Series

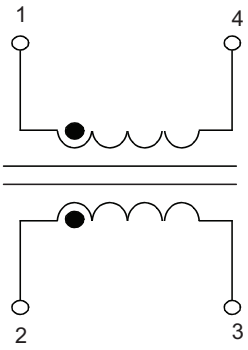
CAN BUS common mode choke series 5 - 4700 µH

L [µH]	Type no.	Marking	Ordering code
5	2824TF0053STLF	0053STLF	191005
11	2824TF0113STLF	0113STLF	191011
25	2824TF0253STLF	0253STLF	191018
51	2824TF0513STLF	0513STLF	191024
470	2824TF4703STLF	4703STLF	191028
1000	2824TF1004STLF	1004STLF	191033
2200	2824TF2204STLF	2204STLF	191041
4700	2824TF4704STLF	4704STLF	191046

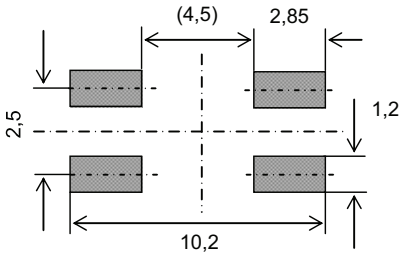


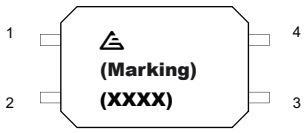


Winding diagram



Footprint (mm)





RoHS

Test:	Pin:	TF0053STLF min	TF0053STLF typ	TF0053STLF max	TF0113STLF min	TF0113STLF typ	TF0113STLF max	TF0253STLF min	TF0253STLF typ	TF0253STLF max	TF0513STLF min	TF0513STLF typ	TF0513STLF max	TF4703STLF min	TF4703STLF typ	TF4703STLF max	Unit:	Condition
Inductance:	1-4 / 2-3	3,5	5.00	6,5	7,7	11.00	14,3	17,5	25.00	32,5	35,7	51.00	66,3	329	470	611	µH	@ 100kHz / 10mV
Leakage inductance:	1-4 (s 2-3)			0.065			0.065			1.5			2.6			0.26	µH	@ 100kHz / 10mV
DC Resistance:	1-4 / 2-3			0.13			0.156		0.13				0.3			0.325	Ω	
TRP:	1-4 / 2-3		1 : 1 +/– 5%			1 : 1 +/– 5%			1 : 1 +/– 5%			1 : 1 +/– 5%			1 : 1 +/– 5%			@ 100kHz / 10mV
Hi-pot	wdg - wdg		500			250			250			250			750		VAC	0,50mA, 2 sec
Idc			1000			500			500			500			500		mA	
CM Insertion loss @ Condition	1-4 (s1-2/4-3)		-14 200 MHz			-20 100 MHz			-26 70 MHz			-25 100 MHz			-28 20 MHz		dB	

Test:	Pin:	TF1004STLF min	TF1004STLF typ	TF1004STLF max	Unit:	Condition	TF2204STLF min	TF2204STLF typ	TF2204STLF max	TF4704STLF min	TF4704STLF typ	TF4704STLF max	Unit:	Condition
Inductance:	1-4 / 2-3	0,7	1.00	1,5	mH	@ 100kHz / 10mV	1,54	2.2	3,3	3,29	4.7	7,05	mH	@ 10kHz / 10mV
Leakage inductance:	1-4 (s 2-3)			0.26	µH	@ 100kHz / 10mV			0.325			0.5	µH	@ 10kHz / 10mV
DC Resistance:	1-4 / 2-3			0.26	Ω				0.52			1.3	Ω	
TRP:	1-4 / 2-3		1 : 1 +/– 5%			@ 100kHz / 10mV		1 : 1 +/– 5%			1 : 1 +/– 5%			@ 10kHz / 10mV
Hi-pot	wdg - wdg		750		VAC	0,50mA, 2 sec		750			750		VAC	0,50mA, 2 sec
Idc			500		mA			400			200		mA	
CM Insertion loss	1-4 (s1-2/4-3)		-33 6 MHz		dB			-36 3 MHz			-40 1.5 MHz		dB	

Common Mode ChokeP7500

The P7500 family is suitable for Common Mode suppression across a broad range of signal applications. Good Common Mode performance is achieved to beyond 500MHz. All chokes will handle DC currents of 300mA minimum.

Available in two mechanical sizes similar to EIA 0805 and 1206.

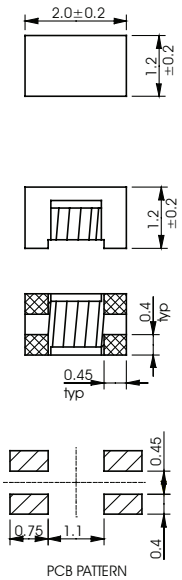
Size 2012 (EIA 0805)

Part Number	Common mode Impedance at 100MHz (Ω)	DCR (Ω) Max	Rated Current I_{DC} (mA)
P7500-2012-900MT	90±25%	0.30	400
P7500-2012-161MT	160±25%	0.35	350
P7500-2012-221MT	220±25%	0.40	300

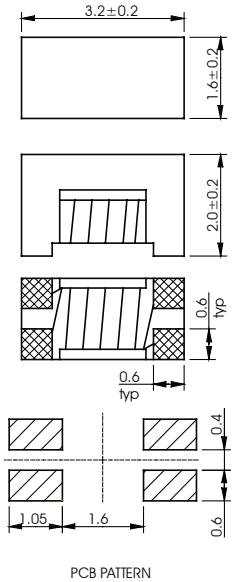
Size 3216 (EIA 1206)

Part Number	Common mode Impedance at 100MHz (Ω)	DCR (Ω) Max	Rated Current I_{DC} (mA)
P7500-3216-900MT	90±25%	0.30	400
P7500-3216-161MT	160±25%	0.35	350
P7500-3216-221MT	220±25%	0.40	300

P7500-2012 dimensions



P7500-3216 dimensions



High Power Inductor P7601

The P7601 family comprises high current, unshielded power inductors. Components are available in three mechanical sizes, suitable for low-profile high current applications. The miniature 1813 parts have very high current rating for their size; the 3316 and 5022 parts exhibit very low DCR. The family employs heavy gauge wire to minimize DCRs, and provides reliable self-leaded Pb-free terminations.

Size 1813

Part Number	Inductance (µH)	DCR (mΩ)	SRF (MHz)	Rated Current I_{RMS} (A)	I_{sat} (A)
P7601-1813-R56M	0.56±20%	10	200	6.0	7.7
P7601-1813-1R2M	1.2±20%	17	140	4.4	5.3
P7601-1813-2R2M	2.2±20%	35	100	3.1	3.5
P7601-1813-4R7M	4.7±20%	54	50	2.2	2.6
P7601-1813-100M	10±20%	111	40	1.5	1.9
P7601-1813-150M	15±20%	170	30	1.2	1.5
P7601-1813-220M	22±20%	250	25	1.0	1.2
P7601-1813-330M	33±20%	350	20	0.8	1.0
P7601-1813-470M	47±20%	470	15	0.7	0.9

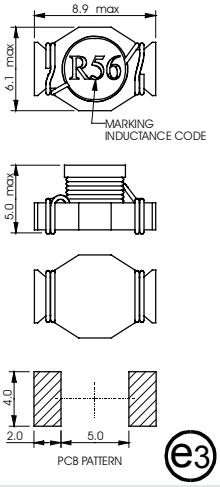
Size 3316

Part Number	Inductance (µH)	DCR (mΩ)	SRF (MHz)	Rated Current I_{RMS} (A)	I_{sat} (A)
P7601-3316-R12M	0.12±20%	1.5	350	20	20
P7601-3316-R33M	0.33±20%	2	300	16	20
P7601-3316-R68M	0.68±20%	5	200	12	13
P7601-3316-1R0M	1.0±20%	6	100	10	11
P7601-3316-1R5M	1.5±20%	8	90	9	9
P7601-3316-2R2M	2.2±20%	11	90	7.4	7.8
P7601-3316-2R7M	2.7±20%	12	65	6.6	7.0
P7601-3316-3R3M	3.3±20%	14	65	5.9	6.4
P7601-3316-4R7M	4.7±20%	18	45	4.8	5.9
P7601-3316-5R6M	5.6±20%	22	40	4.6	5.0
P7601-3316-6R8M	6.8±20%	27	36	4.4	4.6
P7601-3316-8R2M	8.2±20%	32	28	4.0	4.0
P7601-3316-100M	10±20%	38	25	3.9	3.8

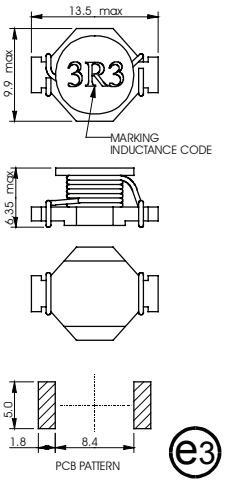
Size 5022

Part Number	Inductance (µH)	DCR (mΩ)	SRF (MHz)	Rated Current I_{RMS} (A)	I_{sat} (A)
P7601-5022-R78M	0.78±20%	2.6	156	15	30
P7601-5022-1R5M	1.5±20%	4	100	15	25
P7601-5022-2R2M	2.2±20%	6	75	12	20
P7601-5022-3R3M	3.3±20%	8	60	10	17
P7601-5022-3R9M	3.9±20%	10	55	9	15
P7601-5022-4R7M	4.7±20%	14	40	8.4	13
P7601-5022-6R0M	6.0±20%	17	35	7.5	12
P7601-5022-7R8M	7.8±20%	18	35	7.5	11
P7601-5022-100M	10±20%	26	28	6.0	10
P7601-5022-150M	15±20%	32	20	4.4	8

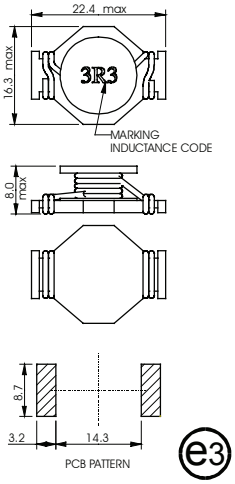
P7601-1813 dimensions



P7601-3316 dimensions



P7601-5022 dimensions



RoHS

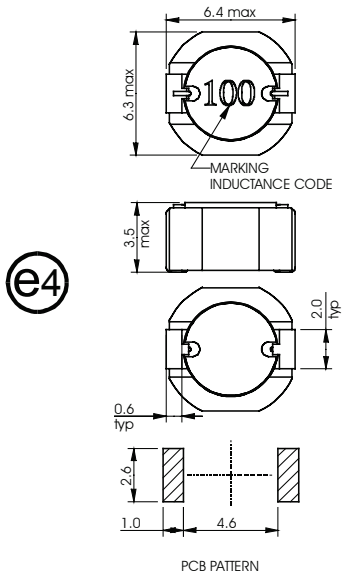
Shielded Power Inductor P7602

The P7602 family comprises low profile, shielded power inductors. Components are available in two mechanical sizes, suited to low-profile applications. The larger 1003 size has lower DCR and higher current rating.

Size 0603

Part Number	Inductance (µH)	DCR (mΩ)	Rated Current I_{RMS} (A)	I_{sat} (A)	Rated Current I_{DC}
P7602-0603-2R0M	2.0±20%	19	3.3	3.0	-
P7602-0603-2R7M	2.7±20%	22	3.1	2.7	-
P7602-0603-3R3M	3.3±20%	26	2.8	2.6	-
P7602-0603-4R7M	4.7±20%	32	2.5	2.1	-
P7602-0603-6R2M	6.2±20%	35	2.4	1.8	-
P7602-0603-8R2M	8.2±20%	44	2.1	1.5	-
P7602-0603-100M	10±20%	50	2.0	1.5	-
P7602-0603-120M	12±20%	62	1.7	1.3	-
P7602-0603-150M	15±20%	77	1.5	1.1	-
P7602-0603-180M	18±20%	82	1.5	1.0	-
P7602-0603-220M	22±20%	106	1.3	0.97	-
P7602-0603-270M	27±20%	140	1.1	0.82	-
P7602-0603-330M	33±20%	162	1.0	0.76	-
P7602-0603-390M	39±20%	192	0.96	0.70	-
P7602-0603-470M	47±20%	209	0.89	0.68	-
P7602-0603-560M	56±20%	257	0.80	0.60	-
P7602-0603-680M	68±20%	320	0.71	0.56	-
P7602-0603-820M	82±20%	420	0.61	0.47	-
P7602-0603-101M	100±20%	477	0.57	0.45	-
P7602-0603-151M	150±20%	664	0.48	0.37	-

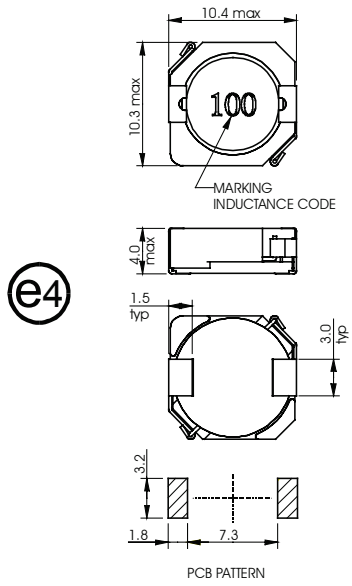
P7602-0603 dimensions



Size 1003

Part Number	Inductance (µH)	DCR (mΩ)	Rated Current I_{RMS} (A)	I_{sat} (A)	Rated Current I_{DC}
P7602-1003-1R5Y	1.5±30%	8.1	-	-	10
P7602-1003-2R5Y	2.5±30%	10	-	-	7.5
P7602-1003-3R8Y	3.8±30%	13	-	-	6
P7602-1003-5R2Y	5.2±30%	22	-	-	5.5
P7602-1003-7R0Y	7.0±30%	27	-	-	4.8
P7602-1003-100Y	10±30%	35	-	-	4.4
P7602-1003-150Y	15±30%	50	-	-	3.6
P7602-1003-220Y	22±30%	73	-	-	2.9
P7602-1003-330Y	33±30%	93	-	-	2.3
P7602-1003-470Y	47±30%	128	-	-	2.1
P7602-1003-680Y	68±30%	213	-	-	1.5
P7602-1003-101Y	100±30%	304	-	-	1.35
P7602-1003-151Y	150±30%	506	-	-	1.15
P7602-1003-221Y	220±30%	756	-	-	0.92
P7602-1003-331Y	330±30%	1090	-	-	0.70

P7602-1003 dimensions



RoHS

Shielded Power Inductor P7603

The P7603 family comprises high current, shielded power inductors. Components are available in eight mechanical sizes, suitable for low-profile high current applications. The family employs heavy gauge wire to minimize DCRs, and provides reliable self-leaded Pb-free terminations. Parts are compliant with RoHS Directive 2002/95/EC, and suitable for Pb-free and conventional placement and reflow.

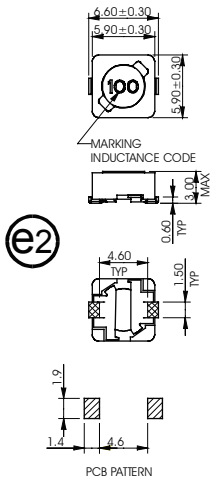
Size 0603

Part Number	Inductance (µH)	DCR (mΩ)	Rated Current I_{RMS} (A)
P7603-0603-2R9M	2.9±20%	0.07	1.9
P7603-0603-4R0M	4.0±20%	0.08	1.6
P7603-0603-5R5M	5.5±20%	0.09	1.4
P7603-0603-100M	10±20%	0.15	1.1
P7603-0603-120M	12±20%	0.20	1.0
P7603-0603-150M	15±20%	0.23	0.90
P7603-0603-180M	18±20%	0.27	0.80
P7603-0603-220M	22±20%	0.34	0.74
P7603-0603-270M	27±20%	0.38	0.66
P7603-0603-330M	33±20%	0.45	0.59
P7603-0603-390M	39±20%	0.49	0.54
P7603-0603-470M	47±20%	0.69	0.50
P7603-0603-560M	56±20%	0.78	0.46
P7603-0603-680M	68±20%	1.1	0.42
P7603-0603-820M	82±20%	1.2	0.38
P7603-0603-101M	100±20%	1.4	0.34
P7603-0603-121M	120±20%	1.9	0.31
P7603-0603-151M	150±20%	2.2	0.28
P7603-0603-181M	180±20%	2.8	0.26
P7603-0603-221M	220±20%	3.1	0.23
P7603-0603-271M	270±20%	4.4	0.22
P7603-0603-331M	330±20%	4.9	0.19

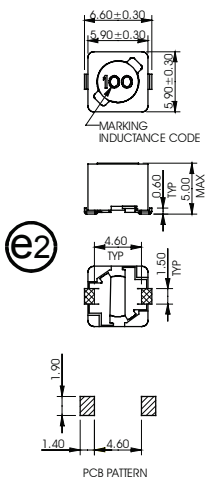
Size 0605

Part Number	Inductance (µH)	DCR (mΩ)	Rated Current I_{RMS} (A)
P7603-0605-100M	10±20%	0.12	1.3
P7603-0605-120M	12±20%	0.13	1.2
P7603-0605-150M	15±20%	0.18	1.1
P7603-0605-180M	18±20%	0.24	1.0
P7603-0605-220M	22±20%	0.27	0.91
P7603-0605-270M	27±20%	0.30	0.82
P7603-0605-330M	33±20%	0.33	0.74
P7603-0605-390M	39±20%	0.37	0.69
P7603-0605-470M	47±20%	0.52	0.62
P7603-0605-560M	56±20%	0.56	0.58
P7603-0605-680M	68±20%	0.63	0.51
P7603-0605-820M	82±20%	0.71	0.46
P7603-0605-101M	100±20%	1.0	0.42
P7603-0605-121M	120±20%	1.2	0.38
P7603-0605-151M	150±20%	1.7	0.35
P7603-0605-181M	180±20%	1.9	0.32
P7603-0605-221M	220±20%	2.1	0.29
P7603-0605-271M	270±20%	2.4	0.26
P7603-0605-331M	330±20%	2.7	0.23
P7603-0605-391M	390±20%	2.9	0.22
P7603-0605-471M	470±20%	3.9	0.20
P7603-0605-561M	560±20%	5.4	0.18
P7603-0605-681M	680±20%	7.3	0.17
P7603-0605-821M	820±20%	8.2	0.15
P7603-0605-102M	1000±20%	9.3	0.14

P7603-0603 dimensions



P7603-0605 dimensions



RoHS

Shielded Power Inductor P7603

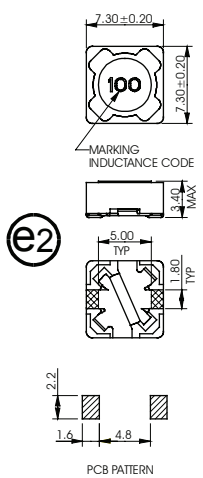
Size 0703

Part Number	Inductance (µH)	DCR (mΩ)	Rated Current I_{RMS} (A)
P7603-0703-100M	10±20%	0.07	1.7
P7603-0703-120M	12±20%	0.10	1.5
P7603-0703-150M	15±20%	0.13	1.3
P7603-0703-180M	18±20%	0.14	1.2
P7603-0703-220M	22±20%	0.19	1.1
P7603-0703-270M	27±20%	0.21	0.96
P7603-0703-330M	33±20%	0.24	0.91
P7603-0703-390M	39±20%	0.32	0.77
P7603-0703-470M	47±20%	0.36	0.76
P7603-0703-560M	56±20%	0.47	0.68
P7603-0703-680M	68±20%	0.52	0.61
P7603-0703-820M	82±20%	0.69	0.57
P7603-0703-101M	100±20%	0.79	0.50
P7603-0703-121M	120±20%	0.89	0.49
P7603-0703-151M	150±20%	1.3	0.43
P7603-0703-181M	180±20%	1.5	0.39
P7603-0703-221M	220±20%	1.7	0.35
P7603-0703-271M	270±20%	2.3	0.32
P7603-0703-331M	330±20%	2.6	0.28
P7603-0703-391M	390±20%	3.0	0.26
P7603-0703-471M	470±20%	4.2	0.24
P7603-0703-561M	560±20%	4.7	0.22
P7603-0703-681M	680±20%	5.7	0.19
P7603-0703-821M	820±20%	6.5	0.18
P7603-0703-102M	1000±20%	9.5	0.16

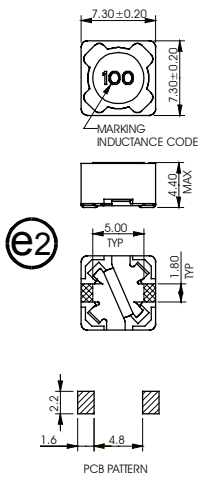
Size 0704

Part Number	Inductance (µH)	DCR (mΩ)	Rated Current I_{RMS} (A)
P7603-0704-100M	10±20%	0.05	1.8
P7603-0704-120M	12±20%	0.06	1.7
P7603-0704-150M	15±20%	0.08	1.5
P7603-0704-180M	18±20%	0.09	1.3
P7603-0704-220M	22±20%	0.11	1.2
P7603-0704-270M	27±20%	0.15	1.1
P7603-0704-330M	33±20%	0.17	0.96
P7603-0704-390M	39±20%	0.23	0.91
P7603-0704-470M	47±20%	0.26	0.88
P7603-0704-560M	56±20%	0.35	0.75
P7603-0704-680M	68±20%	0.38	0.69
P7603-0704-820M	82±20%	0.43	0.61
P7603-0704-101M	100±20%	0.61	0.60
P7603-0704-121M	120±20%	0.66	0.52
P7603-0704-151M	150±20%	0.88	0.46
P7603-0704-181M	180±20%	0.98	0.42
P7603-0704-221M	220±20%	1.2	0.36
P7603-0704-271M	270±20%	1.6	0.34
P7603-0704-331M	330±20%	1.9	0.32
P7603-0704-391M	390±20%	2.9	0.29
P7603-0704-471M	470±20%	3.0	0.26
P7603-0704-561M	560±20%	3.6	0.23
P7603-0704-681M	680±20%	4.6	0.22
P7603-0704-821M	820±20%	5.2	0.20
P7603-0704-102M	1000±20%	6.0	0.18

P7603-0703 dimensions



P7603-0704 dimensions



Pb RoHS

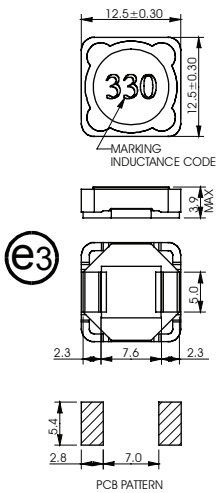
Size 1203

Part Number	Inductance (µH)	DCR (mΩ)	Rated Current I_{RMS} (A)
P7603-1203-1R5M	1.5±20%	13	7.8
P7603-1203-2R2	2.2±20%	15	6.8
P7603-1203-3R9	3.9±20%	26	5.5
P7603-1203-5R6M	5.6±20%	32	4.8
P7603-1203-8R2M	8.2±20%	45	4.1
P7603-1203-100M	10±20%	50	3.9
P7603-1203-120M	12±20%	60	3.5
P7603-1203-150M	15±20%	80	3.0
P7603-1203-180M	18±20%	100	2.7
P7603-1203-220M	22±20%	110	2.5
P7603-1203-270M	27±20%	130	2.2
P7603-1203-330M	33±20%	160	2.1
P7603-1203-390M	39±20%	180	2.0
P7603-1203-470M	47±20%	220	1.8
P7603-1203-560M	56±20%	260	1.6
P7603-1203-680M	68±20%	310	1.5
P7603-1203-820M	82±20%	360	1.4
P7603-1203-101M	100±20%	400	1.3
P7603-1203-121M	120±20%	530	1.1
P7603-1203-151M	150±20%	610	1.0
P7603-1203-181M	180±20%	800	0.90
P7603-1203-221M	220±20%	970	0.85
P7603-1203-271M	270±20%	1200	0.75
P7603-1203-331M	330±20%	1350	0.70

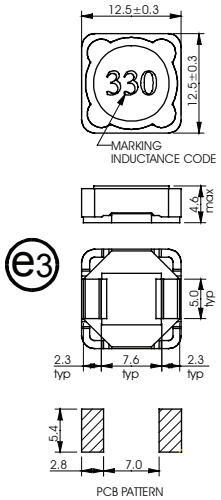
Size 1204

Part Number	Inductance (µH)	DCR (mΩ)	Rated Current I_{RMS} (A)
P7603-1204-3R3M	3.3±20%	15	6.5
P7603-1204-4R7M	4.7±20%	18	5.7
P7603-1204-6R8M	6.8±20%	23	4.9
P7603-1204-100M	10±20%	28	4.5
P7603-1204-120M	12±20%	38	4.0
P7603-1204-150M	15±20%	52	3.2
P7603-1204-180M	18±20%	60	3.1
P7603-1204-220M	22±20%	70	2.9
P7603-1204-270M	27±20%	80	2.8
P7603-1204-330M	33±20%	97	2.7
P7603-1204-390M	39±20%	132	2.1
P7603-1204-470M	47±20%	150	1.9
P7603-1204-560M	56±20%	190	1.8
P7603-1204-680M	68±20%	220	1.5
P7603-1204-820M	82±20%	260	1.3
P7603-1204-101M	100±20%	308	1.2
P7603-1204-121M	120±20%	380	1.1
P7603-1204-151M	150±20%	520	0.95
P7603-1204-181M	180±20%	600	0.85
P7603-1204-221M	220±20%	700	0.80
P7603-1204-271M	270±20%	860	0.60
P7603-1204-331M	330±20%	980	0.50

P7603-1203 dimensions



P7603-1204 dimensions



RoHS

Shielded Power Inductor P7603

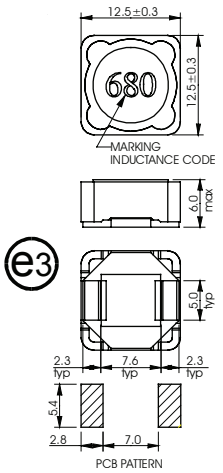
Size 1205

Part Number	Inductance (µH)	DCR (mΩ)	Rated Current I_{RMS} (A)
P7603-1205-1R5Y	1.5±25%	12	8.0
P7603-1205-2R2Y	2.2±25%	14	7.0
P7603-1205-3R1Y	3.1±25%	17	6.0
P7603-1205-4R4Y	4.4±25%	20	5.0
P7603-1205-5R2Y	5.2±25%	21	4.4
P7603-1205-7R5Y	7.5±25%	24	4.2
P7603-1205-100M	10±20%	25	4.0
P7603-1205-120M	12±20%	27	3.5
P7603-1205-150M	15±20%	30	3.3
P7603-1205-180M	18±20%	34	3.0
P7603-1205-220M	2±20%	36	2.8
P7603-1205-270M	27±20%	51	2.3
P7603-1205-330M	33±20%	57	2.1
P7603-1205-390M	39±20%	68	2.0
P7603-1205-470M	47±20%	75	1.8
P7603-1205-560M	56±20%	110	1.7
P7603-1205-680M	68±20%	120	1.5
P7603-1205-820M	82±20%	140	1.4
P7603-1205-101M	100±20%	160	1.3
P7603-1205-121M	120±20%	170	1.1
P7603-1205-151M	150±20%	230	1.0
P7603-1205-181M	180±20%	290	0.90
P7603-1205-221M	220±20%	400	0.80
P7603-1205-271M	270±20%	460	0.75
P7603-1205-331M	330±20%	510	0.68
P7603-1205-391M	390±20%	690	0.65
P7603-1205-471M	470±20%	770	0.58
P7603-1205-561M	560±20%	860	0.54
P7603-1205-681M	680±20%	1200	0.48
P7603-1205-821M	820±20%	1340	0.43
P7603-1205-102M	1000±20%	1530	0.40

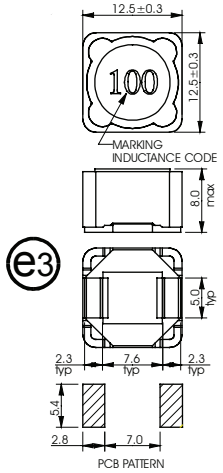
Size 1207

Part Number	Inductance (µH)	DCR (mΩ)	Rated Current I_{RMS} (A)
P7603-1207-1R2Y	1.2±30%	7.0	9.8
P7603-1207-2R7Y	2.7±30%	11.5	8.0
P7603-1207-3R9Y	3.9±30%	13.5	7.5
P7603-1207-4R7Y	4.7±30%	15.8	6.8
P7603-1207-5R6Y	5.6±30%	17.6	6.6
P7603-1207-7R6Y	7.6±30%	20.0	5.9
P7603-1207-100M	10±20%	21.6	5.4
P7603-1207-120M	12±20%	24.3	4.9
P7603-1207-150M	15±20%	27.0	4.5
P7603-1207-180M	18±20%	39.2	3.9
P7603-1207-220M	22±20%	43.2	3.6
P7603-1207-270M	27±20%	45.9	3.4
P7603-1207-330M	33±20%	64.8	3.0
P7603-1207-390M	39±20%	72.9	2.7
P7603-1207-470M	47±20%	100	2.5
P7603-1207-560L	56±15%	110	2.3
P7603-1207-680L	68±15%	140	2.1
P7603-1207-820L	82±15%	160	1.9
P7603-1207-101L	100±15%	220	1.7
P7603-1207-121L	120±15%	250	1.6
P7603-1207-151L	150±15%	280	1.4
P7603-1207-181K	180±10%	350	1.3
P7603-1207-221K	220±10%	390	1.1
P7603-1207-271K	270±10%	560	1.0
P7603-1207-331K	330±10%	640	0.95
P7603-1207-391K	390±10%	700	0.88
P7603-1207-471K	470±10%	980	0.79
P7603-1207-561K	560±10%	1070	0.73
P7603-1207-681K	680±10%	1460	0.67
P7603-1207-821K	820±10%	1640	0.60
P7603-1207-102K	1000±10%	1820	0.55

P7603-1205 dimensions



P7603-1207 dimensions



Pb RoHS

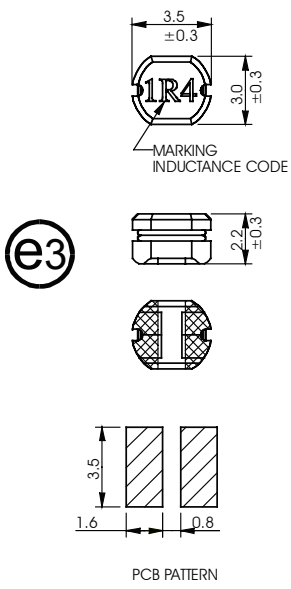
Power Inductor P7609

The P7609 is available in eight low profile sizes (2.2-5.4mm). The range covers three decades of values from 1µH to 820µH, and provides very cost-effective and compact solutions for medium power applications. In this family Pb-free electrodes are directly plated onto the ferrite. Such terminations provide excellent solderability, terminal strength and heat resistance.

Size 032

Part Number	Inductance (µH)	DCR (Ω)	Rated Current I_{RMS} (A)
P7609-032-1R0M	1.0±20%	0.04	1.50
P7609-032-1R4M	1.4±20%	0.05	1.50
P7609-032-2R8M	1.8±20%	0.06	0.80
P7609-032-2R2M	2.2±20%	0.08	0.75
P7609-032-2R7M	2.7±20%	0.10	0.75
P7609-032-3R3M	3.3±20%	0.15	0.60
P7609-032-3R9M	3.9±20%	0.20	0.50
P7609-032-4R7M	4.7±20%	0.20	0.50
P7609-032-5R6M	5.6±20%	0.23	0.45
P7609-032-6R8M	6.8±20%	0.25	0.40
P7609-032-8R2M	8.2±20%	0.30	0.40
P7609-032-100M	10±20%	0.35	0.35
P7609-032-120M	12±20%	0.40	0.35
P7609-032-150M	15±20%	0.50	0.30
P7609-032-180M	18±20%	0.55	0.30
P7609-032-220M	22±20%	0.60	0.30
P7609-032-270M	27±20%	0.70	0.30
P7609-032-330M	33±20%	1.0	0.25
P7609-032-390M	39±20%	1.2	0.25
P7609-032-470M	47±20%	1.5	0.20
P7609-032-560M	56±20%	1.8	0.20
P7609-032-680M	68±20%	2.0	0.18
P7609-032-820M	82±20%	2.5	0.16
P7609-032-101M	100±20%	3.0	0.15
P7609-032-121M	120±20%	3.5	0.14
P7609-032-151M	150±20%	4.0	0.13
P7609-032-181M	180±20%	5.0	0.12
P7609-032-221M	220±20%	5.5	0.10
P7609-032-271M	270±20%	6.0	0.10
P7609-032-331M	330±20%	7.0	0.10
P7609-032-391M	390±20%	8.0	0.10
P7609-032-471M	470±20%	12.0	0.09

P7609-032 dimensions



Size 043

Part Number	Inductance (µH)	DCR (Ω)	Rated Current I_{RMS} (A)
P7609-043-1R0M	1.0±20%	0.033	3.80
P7609-043-1R4M	1.4±20%	0.038	3.30
P7609-043-2R8M	1.8±20%	0.042	2.91
P7609-043-2R2M	2.2±20%	0.047	2.60
P7609-043-2R7M	2.7±20%	0.052	2.43
P7609-043-3R3M	3.3±20%	0.058	2.15
P7609-043-3R9M	3.9±20%	0.076	1.98
P7609-043-4R7M	4.7±20%	0.094	1.70
P7609-043-5R6M	5.6±20%	0.101	1.60
P7609-043-6R8M	6.8±20%	0.117	1.41
P7609-043-8R2M	8.2±20%	0.132	1.26

continued on next page

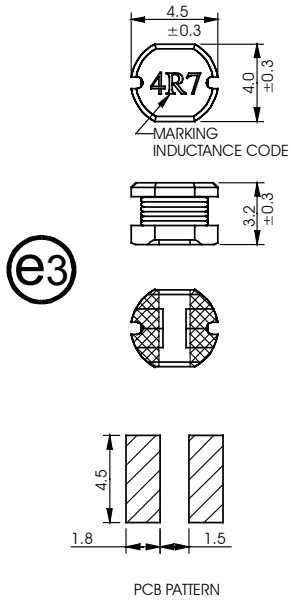
Pb RoHS

Power Inductor P7609

Size 043 (continued)

Part Number	Inductance (µH)	DCR (Ω)	Rated Current I_{RMS} (A)
P7609-043-100M	10±20%	0.182	1.15
P7609-043-120M	12±20%	0.21	1.05
P7609-043-150M	15±20%	0.24	0.92
P7609-043-180M	18±20%	0.34	0.84
P7609-043-220M	22±20%	0.38	0.76
P7609-043-270M	27±20%	0.52	0.71
P7609-043-330K	33±10%	0.54	0.64
P7609-043-390K	39±10%	0.59	0.59
P7609-043-470K	47±10%	0.85	0.54
P7609-043-560K	56±10%	0.94	0.50
P7609-043-680K	68±10%	1.12	0.46

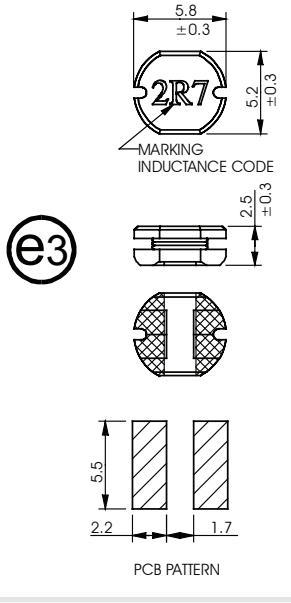
P7609-043 dimensions



Size 052

Part Number	Inductance (µH)	DCR (Ω)	Rated Current I_{RMS} (A)
P7609-052-1R0M	1.0±20%	0.030	4.8
P7609-052-1R4M	1.4±20%	0.035	4.2
P7609-052-2R8M	1.8±20%	0.040	3.8
P7609-052-2R2M	2.2±20%	0.050	3.5
P7609-052-2R7M	2.7±20%	0.055	3.1
P7609-052-3R3M	3.3±20%	0.07	3.0
P7609-052-3R9M	3.9±20%	0.08	2.8
P7609-052-4R7M	4.7±20%	0.09	2.7
P7609-052-5R6M	5.6±20%	0.11	2.2
P7609-052-6R8M	6.8±20%	0.14	1.9
P7609-052-8R2M	8.2±20%	0.15	1.8
P7609-052-100M	10±20%	0.17	1.5
P7609-052-120M	12±20%	0.25	1.4
P7609-052-150M	15±20%	0.28	1.2
P7609-052-180M	18±20%	0.32	1.1
P7609-052-220M	22±20%	0.42	1.0
P7609-052-270M	27±20%	0.45	0.9
P7609-052-330M	33±20%	0.55	0.8
P7609-052-390M	39±20%	0.58	0.75
P7609-052-470M	47±20%	0.83	0.70
P7609-052-560M	56±20%	0.90	0.65
P7609-052-680M	68±20%	0.97	0.60
P7609-052-820M	82±20%	1.2	0.55
P7609-052-101M	100±20%	1.5	0.50
P7609-052-121M	120±20%	1.7	0.47
P7609-052-151M	150±20%	2.0	0.45
P7609-052-181M	180±20%	2.6	0.40
P7609-052-221M	220±20%	3.4	0.35
P7609-052-271M	270±20%	4.0	0.30
P7609-052-331M	330±20%	4.5	0.27
P7609-052-391M	390±20%	5.0	0.25
P7609-052-471M	470±20%	7.0	0.23
P7609-052-561M	560±20%	8.0	0.21

P7609-052 dimensions

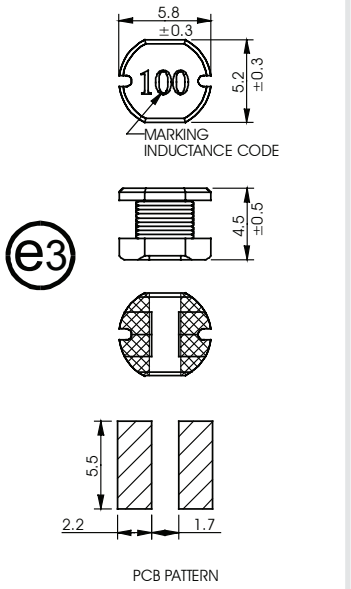


Pb RoHS

Size 054

Part Number	Inductance (µH)	DCR (Ω)	Rated Current I_{RMS} (A)
P7609-054-100M	10±20%	0.10	1.44
P7609-054-120M	12±20%	0.12	1.40
P7609-054-150M	15±20%	0.14	1.30
P7609-054-180M	18±20%	0.15	1.23
P7609-054-220M	22±20%	0.18	1.11
P7609-054-270M	27±20%	0.20	0.97
P7609-054-330K	33±10%	0.23	0.88
P7609-054-390K	39±10%	0.32	0.80
P7609-054-470K	47±10%	0.37	0.72
P7609-054-560K	56±10%	0.42	0.68
P7609-054-680K	68±10%	0.46	0.61
P7609-054-820K	82±10%	0.60	0.58
P7609-054-101K	100±10%	0.70	0.52
P7609-054-121K	120±10%	0.93	0.48
P7609-054-151K	150±10%	1.1	0.40
P7609-054-181K	180±10%	1.4	0.38
P7609-054-221K	220±10%	1.6	0.35

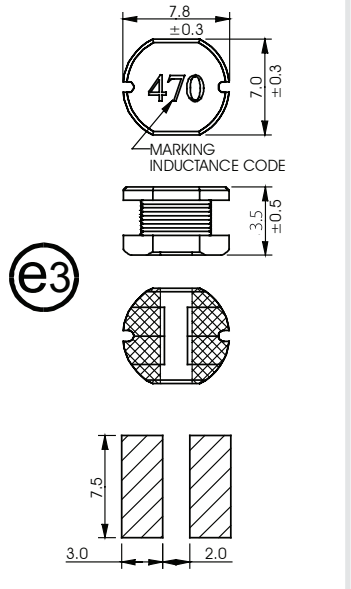
P7609-054 dimensions



Size 073

Part Number	Inductance (µH)	DCR (Ω)	Rated Current I_{RMS} (A)
P7609-073-100M	10±20%	0.080	1.44
P7609-073-120M	12±20%	0.090	1.39
P7609-073-150M	15±20%	0.104	1.24
P7609-073-180M	18±20%	0.11	1.12
P7609-073-220M	22±20%	0.13	1.07
P7609-073-270M	27±20%	0.15	0.97
P7609-073-330M	33±20%	0.17	0.85
P7609-073-390M	39±20%	0.22	0.74
P7609-073-470M	47±20%	0.25	0.68
P7609-073-560K	56±10%	0.28	0.64
P7609-073-680K	68±10%	0.33	0.59
P7609-073-820K	82±10%	0.41	0.54
P7609-073-101K	100±10%	0.48	0.51
P7609-073-121K	120±10%	0.54	0.49
P7609-073-151K	150±10%	0.76	0.40
P7609-073-181K	180±10%	1.02	0.36
P7609-073-221K	220±10%	1.20	0.31
P7609-073-271K	270±10%	1.31	0.29
P7609-073-331K	330±10%	1.50	0.28

P7609-073 dimensions



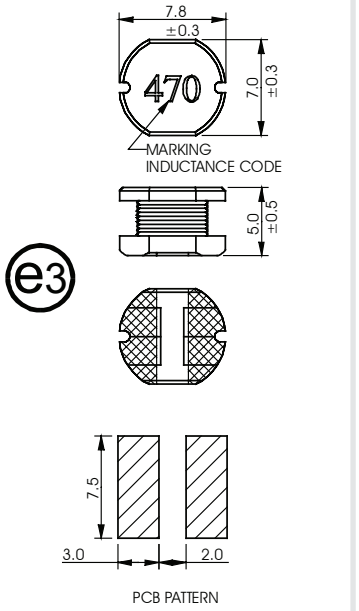
RoHS

Power Inductor P7609

Size 075

Part Number	Inductance (µH)	DCR (Ω)	Rated Current I_{RMS} (A)
P7609-075-100M	10±20%	0.07	2.3
P7609-075-120M	12±20%	0.08	2.0
P7609-075-150M	15±20%	0.09	1.8
P7609-075-180M	18±20%	0.10	1.6
P7609-075-220M	22±20%	0.11	1.5
P7609-075-270M	27±20%	0.12	1.3
P7609-075-330M	33±20%	0.13	1.2
P7609-075-390M	39±20%	0.16	1.1
P7609-075-470K	47±10%	0.18	1.1
P7609-075-560K	56±10%	0.24	0.94
P7609-075-680K	68±10%	0.28	0.85
P7609-075-820K	82±10%	0.37	0.78
P7609-075-101K	100±10%	0.43	0.72
P7609-075-121K	120±10%	0.47	0.66
P7609-075-151K	150±10%	0.64	0.58
P7609-075-181K	180±10%	0.71	0.51
P7609-075-221K	220±10%	0.96	0.49
P7609-075-271K	270±10%	1.1	0.42
P7609-075-331K	330±10%	1.3	0.40
P7609-075-391K	390±10%	1.8	0.36
P7609-075-471K	470±10%	2.0	0.34

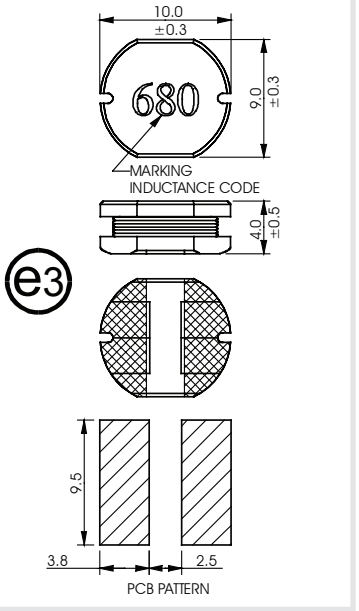
P7609-075 dimensions



Size 104

Part Number	Inductance (µH)	DCR (Ω)	Rated Current I_{RMS} (A)
P7609-104-100M	10±20%	0.053	2.38
P7609-104-120M	12±20%	0.061	2.13
P7609-104-150M	15±20%	0.070	1.87
P7609-104-180M	18±20%	0.081	1.73
P7609-104-220M	22±20%	0.088	1.60
P7609-104-270M	27±20%	0.10	1.44
P7609-104-330M	33±20%	0.12	1.26
P7609-104-390M	39±20%	0.15	1.20
P7609-104-470M	47±20%	0.17	1.10
P7609-104-560K	56±10%	0.20	1.01
P7609-104-680K	68±10%	0.23	0.91
P7609-104-820K	82±10%	0.25	0.85
P7609-104-101K	100±10%	0.35	0.74
P7609-104-121K	120±10%	0.40	0.69
P7609-104-151K	150±10%	0.55	0.61
P7609-104-181K	180±10%	0.62	0.56
P7609-104-221K	220±10%	0.72	0.53
P7609-104-271K	270±10%	0.95	0.45
P7609-104-331K	330±10%	1.10	0.42
P7609-104-391K	390±10%	1.25	0.38
P7609-104-471K	470±10%	1.53	0.35
P7609-104-561K	560±10%	1.91	0.32

P7609-104 dimensions

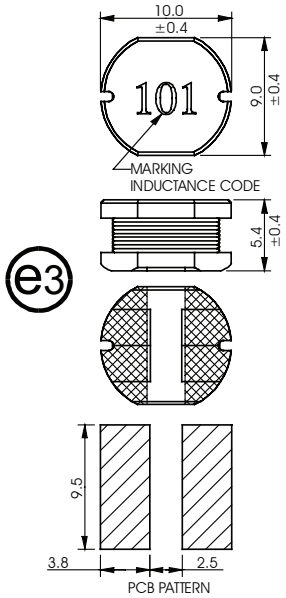


Pb RoHS

Size 105

Part Number	Inductance (µH)	DCR (Ω)	Rated Current I_{RMS} (A)
P7609-105-100M	10±20%	0.06	2.60
P7609-105-120M	12±20%	0.07	2.45
P7609-105-150M	15±20%	0.08	2.27
P7609-105-180M	18±20%	0.09	2.15
P7609-105-220M	22±20%	0.10	1.95
P7609-105-270M	27±20%	0.11	1.76
P7609-105-330M	33±20%	0.12	1.50
P7609-105-390M	39±20%	0.14	1.37
P7609-105-470K	47±10%	0.17	1.28
P7609-105-560K	56±10%	0.19	1.17
P7609-105-680K	68±10%	0.22	1.11
P7609-105-820K	82±10%	0.25	1.00
P7609-105-101K	100±10%	0.35	0.97
P7609-105-121K	120±10%	0.40	0.89
P7609-105-151K	150±10%	0.47	0.78
P7609-105-181K	180±10%	0.63	0.72
P7609-105-221K	220±10%	0.73	0.66
P7609-105-271K	270±10%	0.97	0.57
P7609-105-331K	330±10%	1.15	0.52
P7609-105-391K	390±10%	1.30	0.48
P7609-105-471K	470±10%	1.48	0.42
P7609-105-561K	560±10%	1.90	0.33
P7609-105-681K	680±10%	2.25	0.28
P7609-105-821K	820±10%	2.55	0.24

P7609-105 dimensions



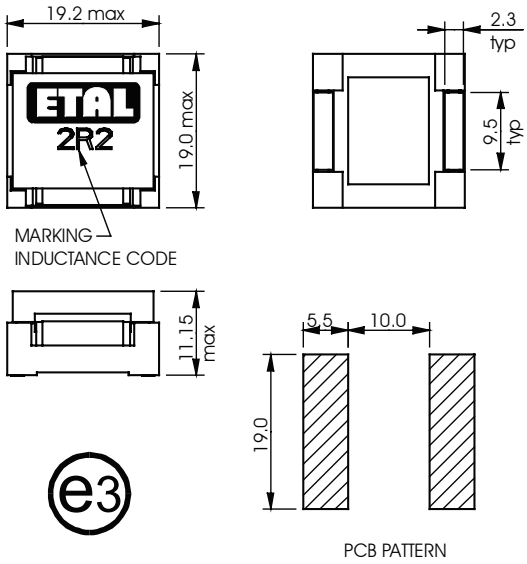
RoHS

High Power Inductor P7611

The P7611 family comprises high-energy-density surface mount inductors. The family employs copper foil windings, giving excellent DC resistance, thermal efficiency and high frequency performance to 1MHz. The core is a closed magnetic circuit to afford magnetic shielding.

Part Number	Nominal Inductance (µH)	Inductance (µH)	DCR (mΩ)	Rated Current I_{RMS} (A)	Isat
P7611-R47MT	0.47	0.52±20%	0.6	53	64
P7611-R68MT	0.68	0.63±20%	0.6	53	50
P7611-1R0MT	1.0	1.15±20%	1.3	33	42
P7611-2R2MT	2.2	2.0±20%	2.3	24	32
P7611-4R7MT	4.7	4.55±20%	4.6	17	21
P7611-5R6MT	5.6	5.6±20%	4.6	17	17

P7611 dimensions



Pb RoHS

High Power Inductor P7612

The P7612 is a high-energy-density surface mount inductor for high current power converters operating at up to 1MHz. The family handles large transient current spikes without saturation. Inductance values are available as low as 0.1µH. Components are available in three mechanical sizes and offer compact solutions for applications requiring high energy storage. The ferrite is moulded over the winding and provides a robust, self shielded structure that operates over a wide temperature range.

Size 0605

Part Number	Inductance (µH)	DCR (mΩ)	I_{RMS} (A)	I_{sat} (A)
P7612-0605-R10Y	0.10±30%	0.5	30	37
P7612-0605-R15Y	0.15±30%	0.5	24	30
P7612-0605-R20Y	0.20±30%	0.5	19	24

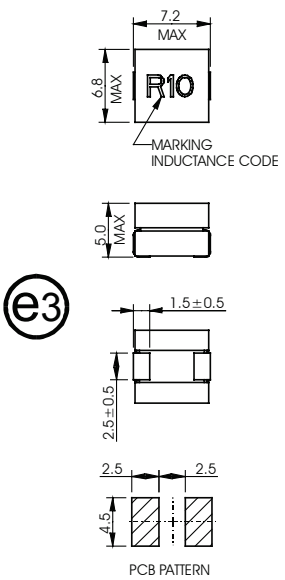
Size 1005

Part Number	Inductance (µH)	DCR (mΩ)	I_{RMS} (A)	I_{sat} (A)
P7612-1005-R10Y	0.10±30%	0.65	40	50
P7612-1005-R15M	0.15±20%	0.65	40	42
P7612-1005-R20M	0.20±20%	0.65	30	35

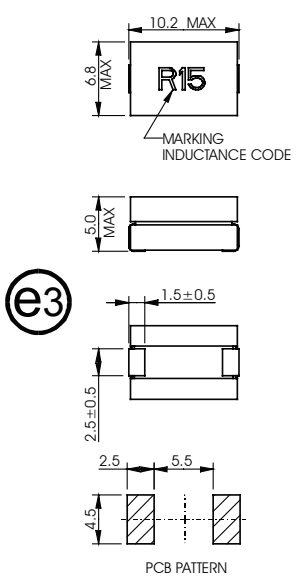
Size 1208

Part Number	Inductance (µH)	DCR (mΩ)	I_{RMS} (A)	I_{sat} (A)
P7612-1208-R15Y	0.15±30%	0.6	50	55
P7612-1208-R21M	0.21±20%	0.6	45	50
P7612-1208-R26M	0.26±20%	0.6	40	45
P7612-1208-R32M	0.32±20%	0.6	40	41
P7612-1208-R44M	0.44±20%	0.6	28	30

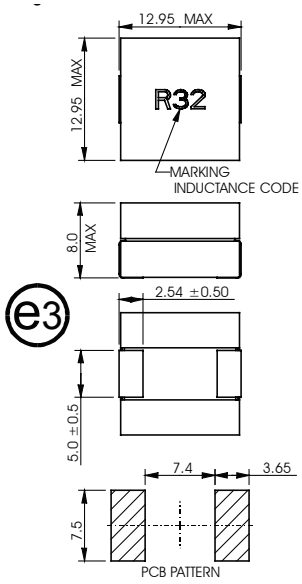
P7612-0605 dimensions



P7612-1005 dimensions



P7612-1208 dimensions



RoHS

High Power Inductor P7614

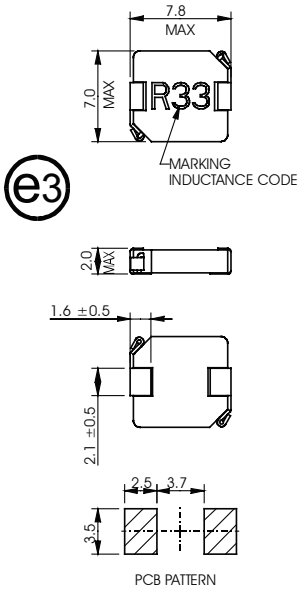
The P7614 is a high-energy-density surface mount inductor for high current power converters. The family handles large transient current spikes without saturation. Inductance values are available as low as 0.1µH.

Components are available in ten mechanical sizes, all offering high energy storage and current handling in very low profile packages.A distributed gap powder core is used, yielding stable inductance at very high currents. The core material is moulded over the winding and provides a robust, self shielded structure that operates over a wide temperature range.

Size 0602

Part Number	Inductance (µH)	DCR (mΩ)	I_{RMS} (A)	I_{sat} (A)
P7614-0602-R10M	0.10±20%	3.5	18	40
P7614-0602-R15M	0.15±20%	5.2	15	28
P7614-0602-R22M	0.22±20%	5.7	14	26
P7614-0602-R33M	0.33±20%	7.0	12	18
P7614-0602-R47M	0.47±20%	9.3	11	18
P7614-0602-R68M	0.68±20%	13.9	9.0	17
P7614-0602-R82M	0.82±20%	15.9	8.0	15
P7614-0602-1R0M	1.0±20%	18	7.0	14
P7614-0602-1R5M	1.5±20%	34	4.0	12
P7614-0602-2R2M	2.2±20%	46	5.0	9.0
P7614-0602-2R5M	2.5±20%	52	3.5	8.0
P7614-0602-3R3M	3.3±20%	60	3.25	7.0
P7614-0602-4R7M	4.7±20%	78	3.0	5.0

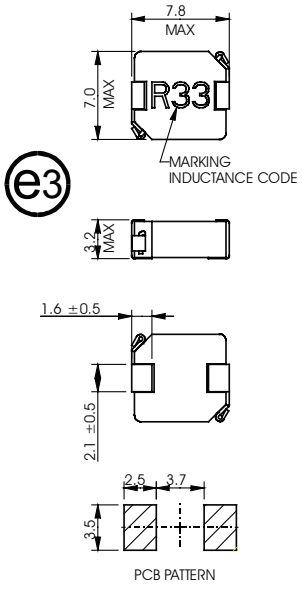
P7614-0602 dimensions



Size 0603

Part Number	Inductance (µH)	DCR (mΩ)	I_{RMS} (A)	I_{sat} (A)
P7614-0603-R10M	0.10±20%	1.7	32.5	42
P7614-0603-R15M	0.15±20%	2.5	26	38
P7614-0603-R20M	0.20±20%	3.0	24	36
P7614-0603-R22M	0.22±20%	2.8	23	36
P7614-0603-R33M	0.33±20%	3.9	20	30
P7614-0603-R47M	0.47±20%	4.2	17.5	26
P7614-0603-R68M	0.68±20%	5.5	15.5	23
P7614-0603-R82M	0.82±20%	8.0	13	20
P7614-0603-1R0M	1.0±20%	10	11	16
P7614-0603-1R5M	1.5±20%	15	9.0	14
P7614-0603-1R8M	1.8±20%	20	9.0	17
P7614-0603-2R2M	2.2±20%	20	8.0	12
P7614-0603-3R3M	3.3±20%	30	6.0	10
P7614-0603-4R7M	4.7±20%	40	5.5	6.5
P7614-0603-6R8M	6.8±20%	60	4.5	6.0
P7614-0603-8R2M	8.2±20%	68	4.0	5.5
P7614-0603-100M	10±20%	105	3.0	4.5

P7614-0603 dimensions



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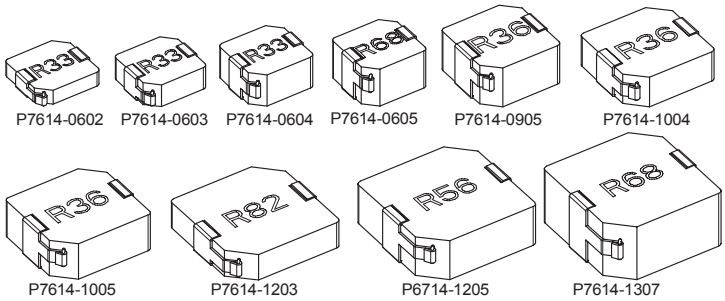
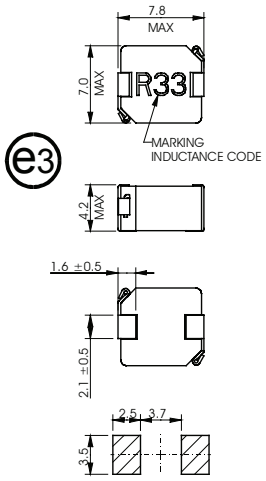
RoHS



Size 0604

Part Number	Inductance (µH)	DCR (mΩ)	I_{RMS} (A)	I_{sat} (A)
P7614-0604-R33M	0.33±20%	1.4	23	32
P7614-0604-R47M	0.47±20%	2.0	20	30
P7614-0604-R68M	0.68±20%	3.8	17	28
P7614-0604-R82M	0.82±20%	5.0	15	24
P7614-0604-1R0M	1.0±20%	7.0	13	20
P7614-0604-1R2M	1.2±20%	8.0	12	18
P7614-0604-1R5M	1.5±20%	10	11	16
P7614-0604-1R8M	1.8±20%	13	10.5	14
P7614-0604-2R2M	2.2±20%	15	10	14
P7614-0604-3R3M	3.3±20%	18	7.0	11
P7614-0604-4R7M	4.7±20%	21	6.0	9.0
P7614-0604-5R6M	5.6±20%	30	5.5	7.0
P7614-0604-6R8M	6.8±20%	32	5.0	7.0

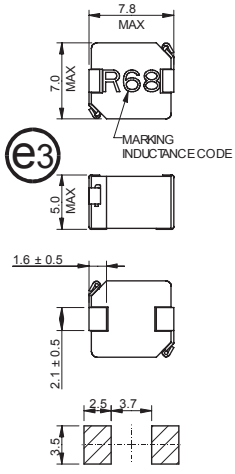
P7614-0604 dimensions



Size 0605

Part Number	Inductance (µH)	DCR (mΩ)	I_{RMS} (A)	I_{sat} (A)
P7614-0605-R39M	0.39±20%	2.6	21	30
P7614-0605-R68M	0.68±20%	3.8	18	28
P7614-0605-1R0M	1.0±20%	4.2	15	22
P7614-0605-1R5M	1.5±20%	5.4	16	18
P7614-0605-2R2M	2.2±20%	8.2	13	15
P7614-0605-3R3M	3.3±20%	15.2	10	13
P7614-0605-4R7M	4.7±20%	19	7	10
P7614-0605-6R8M	6.8±20%	30	6	8
P7614-0605-100M	10±20%	45	5	6

P7614-0605 dimensions



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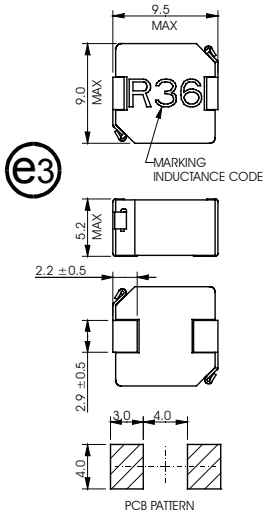
High Power Inductor P7614

Size 0905

Part Number	Inductance (µH)	DCR (mΩ)	I_{RMS} (A)	I_{sat} (A)
P7614-0905-R10M	0.10±20%	0.7	40	45
P7614-0905-R20M	0.20±20%	0.8	35	45
P7614-0905-R36M	0.36±20%	1.2	32	40
P7614-0905-R47M	0.47±20%	1.5	30	38
P7614-0905-R56M	0.56±20%	1.8	28	36
P7614-0905-R68M	0.68±20%	2.4	23	32
P7614-0905-R82M	0.82±20%	2.4	20	25
P7614-0905-1R0M	1.0±20%	3.8	18	22
P7614-0905-1R5M	1.5±20%	4.5	15	20
P7614-0905-2R2M	2.2±20%	5.4	12	16
P7614-0905-3R3M	3.3±20%	7.1	10	14
P7614-0905-4R7M	4.7±20%	12.3	9.0	13
P7614-0905-5R6M	5.6±20%	14.5	8.0	12
P7614-0905-6R8M	6.8±20%	20.5	7.0	11
P7614-0905-8R2M	8.2±20%	22	6.0	10
P7614-0905-100M	10.0±20%	27	5.0	9.0

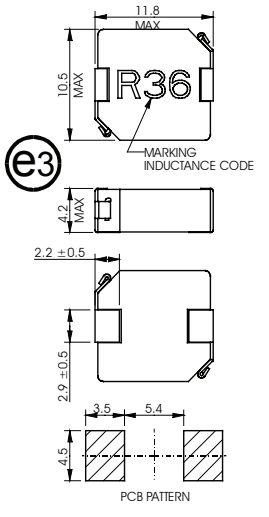
P7614-0905 dimensions



Size 1004

Part Number	Inductance (µH)	DCR (mΩ)	I_{RMS} (A)	I_{sat} (A)
P7614-1004-R36M	0.36±20%	1.4	28	40
P7614-1004-R47M	0.47±20%	1.6	26	38
P7614-1004-R56M	0.56±20%	1.9	25	36
P7614-1004-R68M	0.68±20%	2.4	23	32
P7614-1004-1R0M	1.0±20%	3.5	20	28
P7614-1004-1R5M	1.5±20%	7.5	12	20
P7614-1004-2R2M	2.2±20%	8.6	11.5	16.5
P7614-1004-3R3M	3.3±20%	10.0	10.0	14
P7614-1004-4R7M	4.7±20%	13.5	8.0	13
P7614-1004-6R8M	6.8±20%	24.0	6.5	11
P7614-1004-100M	10.0±20%	35.0	5.0	9

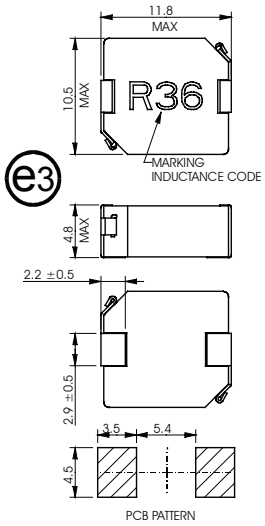
P7614-1004 dimensions



Size 1005

Part Number	Inductance (µH)	DCR (mΩ)	I_{RMS} (A)	I_{sat} (A)
P7614-1005-R36M	0.36±20%	0.8	35	40
P7614-1005-R47M	0.47±20%	0.9	32	38
P7614-1005-R56M	0.56±20%	1.1	30	36
P7614-1005-R68M	0.68±20%	1.3	29	32
P7614-1005-1R0M	1.0±20%	2.2	24	28
P7614-1005-1R5M	1.5±20%	2.6	20	22
P7614-1005-2R2M	2.2±20%	4.0	17	20

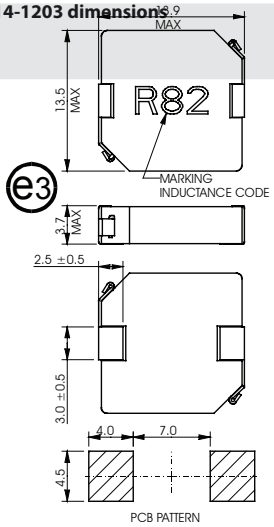
P7614-1005 dimensions



Size 1203

Part Number	Inductance (µH)	DCR (mΩ)	I_{RMS} (A)	I_{sat} (A)
P7614-1203-R10M	0.10±20%	0.96	43	56
P7614-1203-R15M	0.15±20%	1.2	41	50
P7614-1203-R22M	0.22±20%	1.3	38.5	50
P7614-1203-R32M	0.33±20%	1.5	36.5	50
P7614-1203-R47M	0.47±20%	2.0	32	44
P7614-1203-R60M	0.60±20%	2.5	29	42
P7614-1203-R68M	0.68±20%	2.5	28	40
P7614-1203-R82M	0.82±20%	3.0	25	38
P7614-1203-1R0M	1.0±20%	3.5	24	36
P7614-1203-1R5M	1.5±20%	5.5	19	28
P7614-1203-1R8M	1.8±20%	7.0	16.5	24
P7614-1203-2R2M	2.2±20%	8.0	16	20
P7614-1203-3R3M	3.3±20%	12	12	18
P7614-1203-4R7M	4.7±20%	15	10	16
P7614-1203-5R6M	5.6±20%	18	10	14
P7614-1203-6R8M	6.8±20%	22	9.0	13
P7614-1203-8R2M	8.2±20%	28	8.5	12
P7614-1203-100M	10.0±20%	34	7.0	9.5

P7614-1203 dimensions



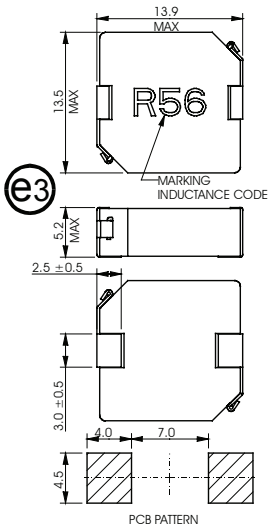
RoHS

High Power Inductor P7614

Size 1205

Part Number	Inductance (µH)	DCR (mΩ)	I_{RMS} (A)	I_{sat} (A)
P7614-1205-R36M	0.36±20%	1.1	41	75
P7614-1205-R47M	0.47±20%	1.3	38	65
P7614-1205-R56M	0.56±20%	1.5	36	55
P7614-1205-R68M	0.68±20%	1.7	34	54
P7614-1205-1R0M	1.0±20%	2.5	29	50
P7614-1205-1R5M	1.5±20%	4.1	23	48
P7614-1205-2R2M	2.2±20%	5.5	20	32
P7614-1205-3R3M	3.3±20%	9.2	15	32
P7614-1205-4R7M	4.7±20%	15	16	27
P7614-1205-6R8M	6.8±20%	18	13	21
P7614-1205-8R2M	8.2±20%	14	9.5	18
P7614-1205-100M	10.0±20%	18	9.0	16
P7614-1205-120M	12.0±20%	18	7.5	10

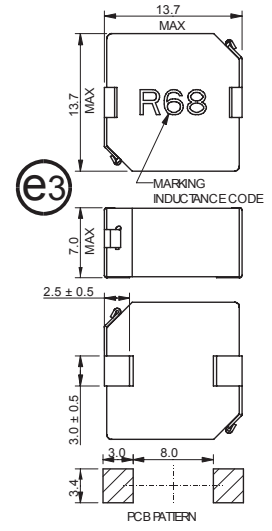
P7614-1205 dimensions



Size 1307

Part Number	Inductance (µH)	DCR (mΩ)	I_{RMS} (A)	I_{sat} (A)
P7614-1307-R47M	0.47±20%	1.2	41	65
P7614-1307-R68M	0.68±20%	1.6	35	60
P7614-1307-1R0M	1.0±20%	2.1	32	50
P7614-1307-1R5M	1.5±20%	2.6	27	48
P7614-1307-2R2M	2.2±20%	4.2	22	40
P7614-1307-3R3M	3.3±20%	6.8	18	35
P7614-1307-4R7M	4.7±20%	11.2	15	30
P7614-1307-6R8M	6.8±20%	14	12	21
P7614-1307-100M	10.0±20%	17	10	16

P7614-1307 dimensions



Pb RoHS

Notes

Notes

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