HIGH CURRENT MOLDED POWER INDUCTOR P7636 Family

Features

- Lead free (Pb-free)
- RoHS compliant
- Very low DC resistance
- Very high current rating
- Low profile
- Flat top for pick & place
- Shielded

Applications

Energy storage choke for
- DC/DC Converters
- VRM modules
- POL Converters

DESCRIPTION

The P7636 family comprises of very high current shielded power choke coil in low profile size.

The products self-leaded construction consist of ferrite core and helical coil from enamel-coated copper wire.

The range covers inductance values from 0.33µH to 10µH, and provides compact solutions for high power applications with saturation currents ranging between 16 A to 80 A.

The P7636 family is compliant with RoHS Directive 2002/95/EC and suitable for lead-free and conventional placement and reflow.

Pb RoHS COMPLIANT

P7636

SPECIFICATIONS

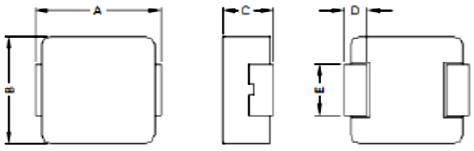
ELECTRICAL

Part No.	Inductance (µH) L_0	I_{sat} (A) Typ.	DCR (mΩ)	Height
P7636-1205-R33M	0,33	80	0,70	4,80
P7636-1205-R47M	0,47	65	0,86	4,80
P7636-1205-R56M	0,56	55	1,00	4,80
P7636-1205-R68M	0,68	54	1,40	4,80
P7636-1205-1R0M	1,00	50	1,85	4,80
P7636-1205-1R5M	1,50	48	2,80	4,80
P7636-1205-1R8M	1,80	40	4,00	4,80
P7636-1205-2R2M	2,20	32	4,20	4,80
P7636-1205-3R3M	3,30	32	6,80	4,80
P7636-1205-4R7M	4,70	27	11,40	4,80
P7636-1205-5R6M	5,60	21	12,30	4,80
P7636-1205-6R8M	6,80	21	14,50	4,80
P7636-1205-8R2M	8,20	18	16,80	4,80
P7636-1205-100M	10,00	16	21,40	4,80

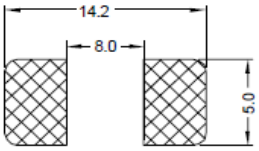
Notes:

a) Test Freq. : 100KHz/ 1V
b) Ambient Temp. : 25℃
c) Operating Temp. : -40℃ to +125℃
d) Storage Temp. : -10℃ to +40℃
e) Humidity Range. : 50~60% RH (Product without taping)
f) Heat Rated Current (Irms) will cause the coil temperature rise approximately Δt of 40℃. (keep 1min)
g) Saturation Current (Isat 1) will cause L0 to drop 20% typical. (keep quickly)
h) Part Temperature (Ambient+Temp.Rise): Should not exceed 125℃ under worst case operating conditions.

CONSTRUCTION



Recommended PC Board Pattern



A	B	C	D	E
13,5±0,5	12,5±0,3	4,8±0,2	2,3±0,3	4,7±0,3

Unit: mm

MARKING

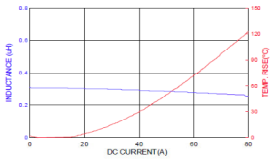
- Product Code (Height code + Inductance code)
- Manufacturing Date Code

P7636

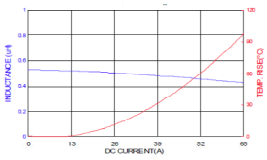
SPECIFICATIONS

CHARACTERISTIC CURVES

P7636-1205-R33M



P7636-1205-R47M



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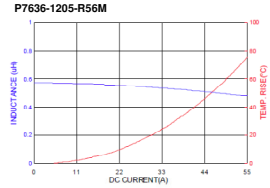
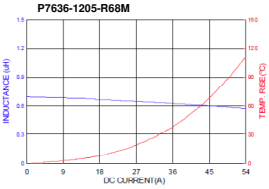
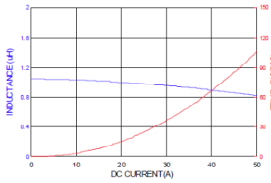


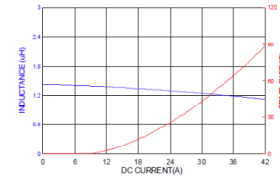
P7636-1205-R68M



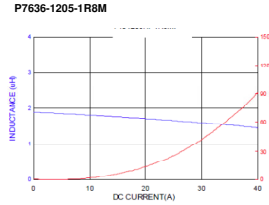
P7636-1205-1R0M



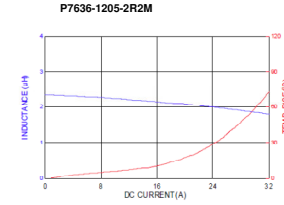
P7636-1205-1R5M



P7636-1205-1R8M



P7636-1205-2R2M



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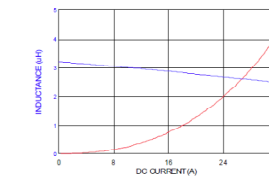
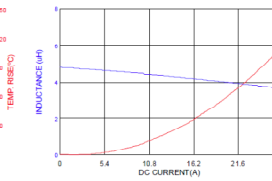
SPECIFICATIONS

CHARACTERISTIC CURVES

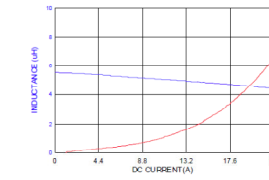
P7636-1205-3R3M



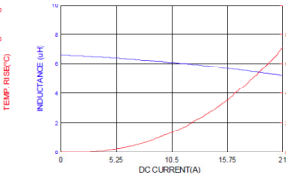
P7636-1205-4R7M



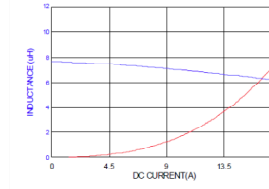
P7636-1205-5R6M



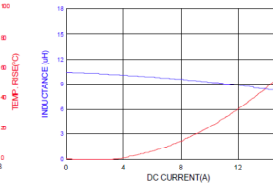
P7636-1205-6R8M



P7636-1205-8R2M



P7636-1205-100M

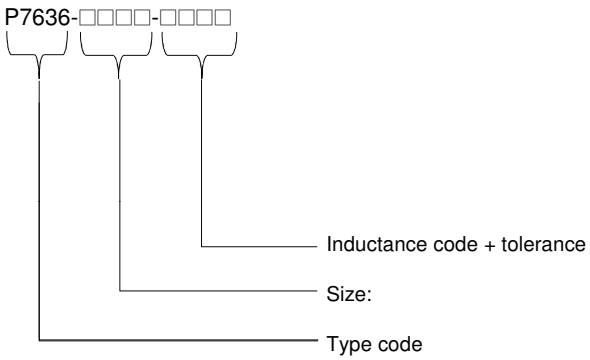


SPECIFICATIONS

CHARACTERISTIC CURVES

a) The inductance vs. current and temperature characteristic curves presented are typical values
b) The inductance vs. current curves are generated by measuring inductors at 25ºC ambient temperature.
c) Temperature rise is measured at an ambient temperature of 25ºC. A current is applied for 8 minutes and temperature is measured when the point of the components temperature is stable using an infrared thermometer directed at the bottom surface of the component. No forced air cooling is applied.
d) Temperature response need to be verified in specific applications and can only be carried out by the customer

ORDERING CODE



NOTES:
Units are packed in tape and reel

RoHS COMPLIANT

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