

■Mn-Zn Core Surface Mount Shielded Power Inductors CHTPR Series

(錳鋅鐵芯表面接著型閉磁式功率電感-----CHTPR 系列)



●Features(特徵):

1. Low profile and shielded very effective in space-conscious applications.(高度扁薄且具磁遮蔽，非常適合有空間顧慮之應用。)
2. Low resistance and high energy storage.(低電阻及高能量儲存。)

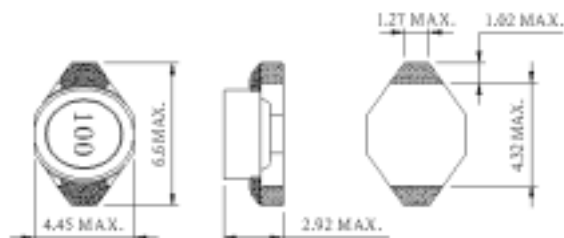
●Applications(應用):

Excellent as DC-DC Converter used in notebooks computers, PDA and mobile handphones. Step-up or step-down converters, flash memory.

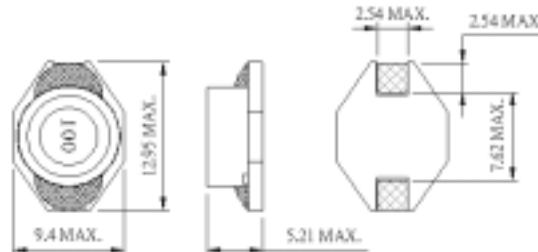
絕佳的筆記型電腦、個人數位助理和行動電話中的直流-直流整流器，增壓或降壓整流器及快閃記憶體。

●Shape & Dimensions(外觀呎吋):

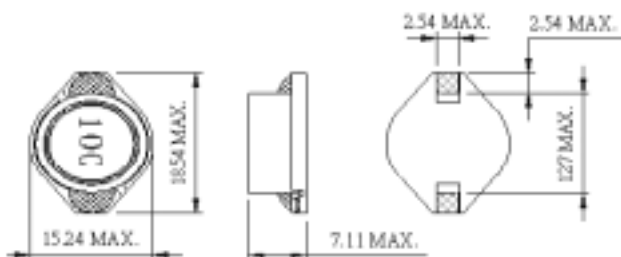
CHTPR1608 Type:



CHTPR3316 Type:



CHTPR5022 Type:



●Specification(規格):

◆CHTPR1608 Series:



- 1, Magnetically shielded.
- 2, Highest efficiency of any comparable parts 10% to 60% lower DCR than other currently available inductors.
- 3, Surface mount design, fully pick and place compatible.
- 4, Designed for use at switching frequencies from 50 kHz to 1 MHz.

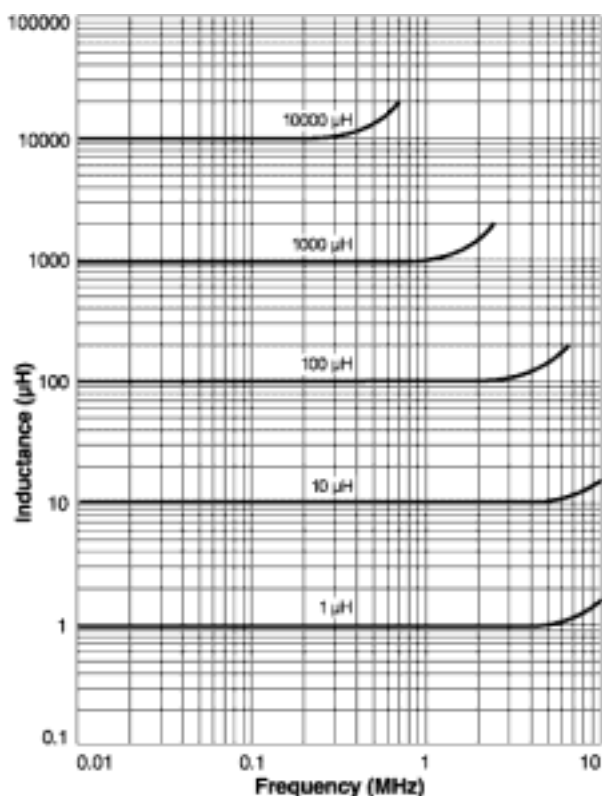
Part Number	Inductance (μ H)	Q Min	DC Resistance (Ω) max.	SRF (MHz) Min	Rated Current (A) max
CHTPR1608-1R0M	1.0 $\pm$ 20%	30 @ 200 kHz	0.040	250	1.40
CHTPR1608-1R5M	1.5 $\pm$ 20%	30 @ 200 kHz	0.045	125	0.93
CHTPR1608-2R2M	2.2 $\pm$ 20%	40 @ 200 kHz	0.050	120	0.92
CHTPR1608-3R3M	3.3 $\pm$ 20%	40 @ 200 kHz	0.055	120	0.75
CHTPR1608-4R7M	4.7 $\pm$ 20%	40 @ 200 kHz	0.060	105	0.58
CHTPR1608-6R8M	6.8 $\pm$ 20%	40 @ 200 kHz	0.065	50	0.58
CHTPR1608-100M	10 $\pm$ 20%	40 @ 200 kHz	0.075	38	0.37
CHTPR1608-150M	15 $\pm$ 20%	40 @ 100 kHz	0.09	33	0.31
CHTPR1608-220M	22 $\pm$ 20%	40 @ 100 kHz	0.11	25	0.30

Surface Mount Shielded Power Inductors

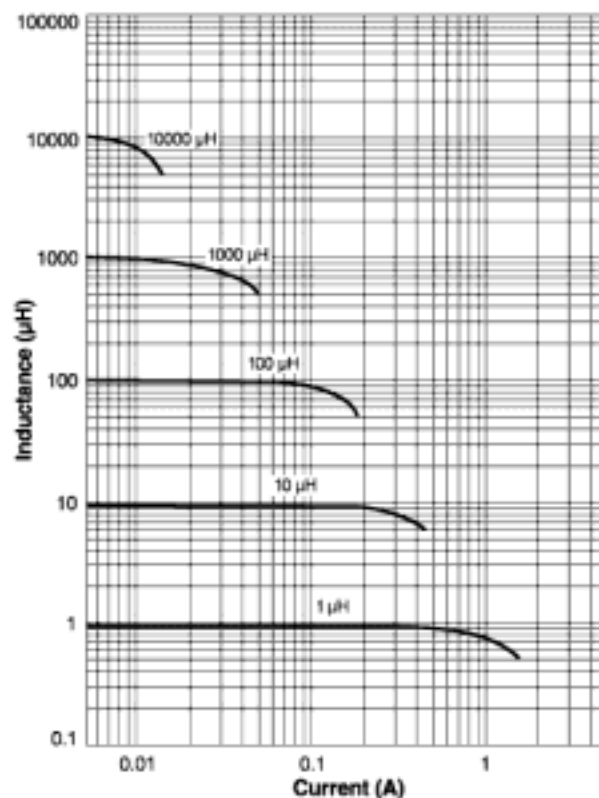
◆CHTPR1608 Series:

Part Number	Inductance (μ H)	Q Min	DC Resistance (Ω) max.	SRF (MHz) Min	Rated Current (A) max
CHTPR1608-330M	33 $\pm$ 20%	40 @ 100 kHz	0.19	20	0.28
CHTPR1608-470M	47 $\pm$ 20%	40 @ 100 kHz	0.23	20	0.24
CHTPR1608-680M	68 $\pm$ 20%	40 @ 100 kHz	0.29	15	0.17
CHTPR1608-101M	100 $\pm$ 20%	40 @ 100 kHz	0.48	10	0.13
CHTPR1608-151M	150 $\pm$ 20%	40 @ 100 kHz	0.59	9	0.10
CHTPR1608-221M	220 $\pm$ 20%	40 @ 100 kHz	0.77	6	0.10
CHTPR1608-331M	330 $\pm$ 20%	40 @ 100 kHz	1.4	5	0.07
CHTPR1608-471M	470 $\pm$ 20%	40 @ 100 kHz	1.8	4	0.06
CHTPR1608-681M	680 $\pm$ 20%	40 @ 100 kHz	2.2	3	0.055
CHTPR1608-102M	1000 $\pm$ 20%	40 @ 100 kHz	3.4	2	0.045
CHTPR1608-152M	1500 $\pm$ 20%	50 @ 100 kHz	4.2	2	0.035
CHTPR1608-222M	2200 $\pm$ 20%	50 @ 100 kHz	8.5	2	0.028
CHTPR1608-332M	3300 $\pm$ 20%	50 @ 100 kHz	11.0	1	0.024
CHTPR1608-472M	4700 $\pm$ 20%	50 @ 100 kHz	13.9	1	0.021
CHTPR1608-682M	6800 $\pm$ 20%	50 @ 100 kHz	25.0	1	0.019
CHTPR1608-103M	10000 $\pm$ 20%	50 @ 100 kHz	32.8	0.8	0.017

◆Inductance vs. Frequency:



◆Inductance vs. Current:



◆Note:

- 1, Inductance tested at 0.1 Vrms, 100 kHz
- 2, Isat: DC current at which the inductance drops 30% (typ.) from its value without current.
- 3, Operating temperature range -40°C to +85°C.
- 4, Electrical specifications at 25°C.

Surface Mount Shielded Power Inductors

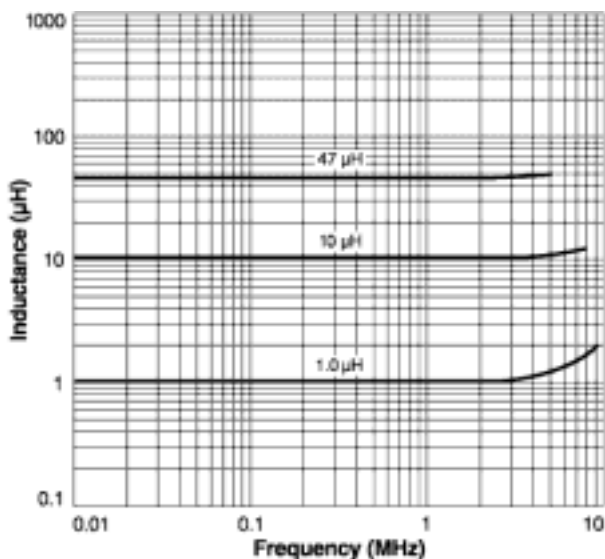
◆CHTPR3316 Series:



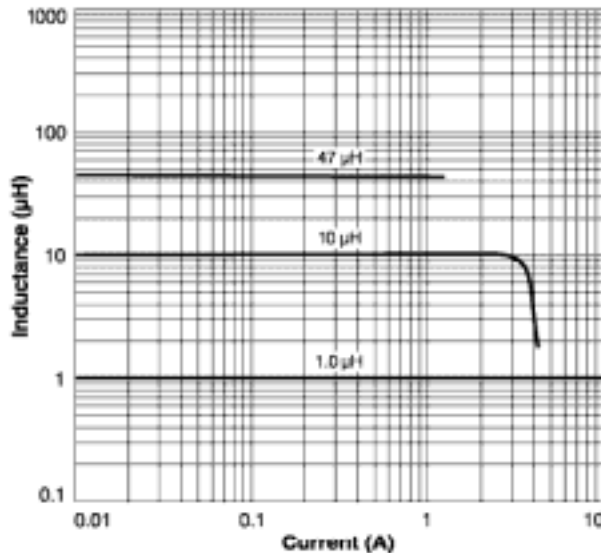
- 1, Magnetically shielded.
- 2, Excellent current carrying capabilities in a small footprint – only 12.95 x 9.40.
- 3, Up to 5 Arms with an 5.6 Amps saturation current.
- 4, Flat top for reliable surface mounting.
- 5, Robust temperature deflection prevents damage during solder reflow.

Part Number	Inductance (μ H)	DC Resistance (Ω) max.	SRF (MHz) Min	Isat (A) Max	Irms (A) max
CHTPR3316-1R0M	1.0 $\pm$ 20%	0.021	140	5.60	5.0
CHTPR3316-1R5M	1.5 $\pm$ 20%	0.022	120	5.20	4.5
CHTPR3316-2R2M	2.2 $\pm$ 20%	0.032	80	5.00	3.8
CHTPR3316-3R3M	3.3 $\pm$ 20%	0.039	70	3.90	3.3
CHTPR3316-4R7M	4.7 $\pm$ 20%	0.054	40	3.20	2.7
CHTPR3316-6R8M	6.8 $\pm$ 20%	0.075	38	2.80	2.2
CHTPR3316-100M	10 $\pm$ 20%	0.101	35	2.40	2.0
CHTPR3316-150M	15 $\pm$ 20%	0.150	25	2.00	1.5
CHTPR3316-220M	22 $\pm$ 20%	0.207	19	1.60	1.3
CHTPR3316-330M	33 $\pm$ 20%	0.334	15	1.40	1.1
CHTPR3316-470M	47 $\pm$ 20%	0.472	13	1.00	0.8
CHTPR3316-680M	68 $\pm$ 20%	0.66	10	0.90	0.7
CHTPR3316-101M	100 $\pm$ 20%	1.1	7	0.80	0.6
CHTPR3316-151M	150 $\pm$ 20%	1.55	6	0.60	0.5
CHTPR3316-221M	220 $\pm$ 20%	2.00	5	0.50	0.4
CHTPR3316-102M	1000 $\pm$ 20%	8.30	2	0.32	0.2

◆Inductance vs. Frequency:



◆Inductance vs. Current:



◆Note:

- 1, Inductance tested at 100 kHz, 0.1 Vrms.
- 2, Isat: DC current at which the inductance drops 10% (typ) from its value without current.
- 3, Irms: Average current for 40°C temperature rise from 25°C ambient.
- 4, Operating temperature range -40°C to +85°C.
- 5, Electrical specifications at 25°C.

Surface Mount Shielded Power Inductors

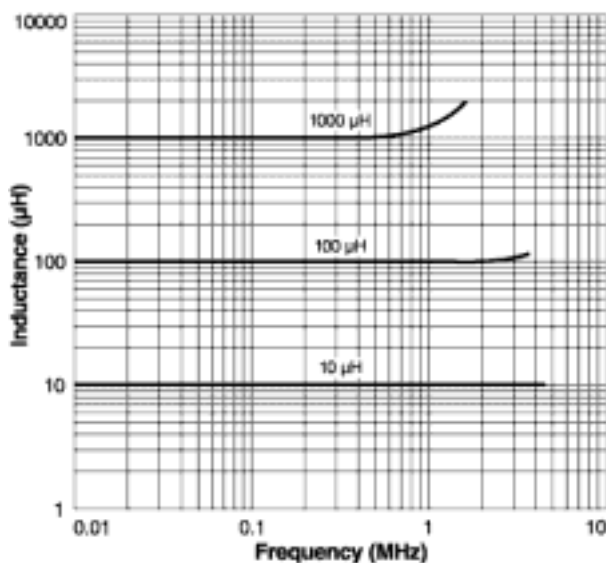
◆CHTPR5022 Series:



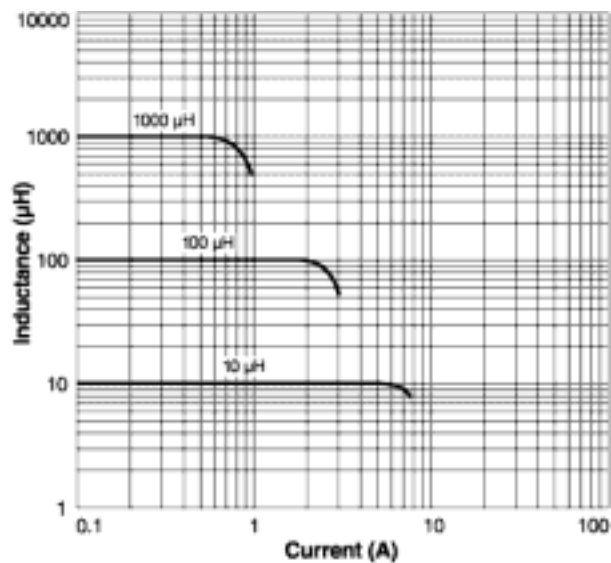
- 1, Magnetically shielded.
- 2, Designed for higher load currents - up to 3.9 Arms.
- 3, Very low DCR keeps power losses to a minimum.
- 4, Flat top for reliable surface mounting.
- 5, Robust temperature deflection prevents damage during solder reflow.
- 6, End terminations for sound solder fillets and easy inspection.

Part Number	Inductance (μ H)	DC Resistance (Ω) max.	SRF (MHz) Min	Isat (A) Max	Irms (A) max
CHTPR5022-100M	10 $\pm$ 20%	0.040	30	8	3.90
CHTPR5022-150M	15 $\pm$ 20%	0.048	20	7	3.40
CHTPR5022-220M	22 $\pm$ 20%	0.059	18	6	3.10
CHTPR5022-330M	33 $\pm$ 20%	0.075	14	5	2.80
CHTPR5022-470M	47 $\pm$ 20%	0.097	10	4	2.40
CHTPR5022-680M	68 $\pm$ 20%	0.138	9	3	2.00
CHTPR5022-101M	100 $\pm$ 20%	0.207	7	2.4	1.70
CHTPR5022-151M	150 $\pm$ 20%	0.293	6	2.1	1.30
CHTPR5022-221M	220 $\pm$ 20%	0.47	5	1.9	1.10
CHTPR5022-331M	330 $\pm$ 20%	0.78	4	1.1	0.86
CHTPR5022-471M	470 $\pm$ 20%	1.08	3	1.1	0.73
CHTPR5022-681M	680 $\pm$ 20%	1.40	2.5	0.96	0.64
CHTPR5022-102M	1000 $\pm$ 20%	2.01	2.0	0.80	0.53

◆Inductance vs. Frequency:



◆Inductance vs. Current:



◆Note:

- 1, Inductance tested at 100 kHz, 0.1 Vrms.
- 2, Isat: DC current at which the inductance drops 10% (typ) from its value without current.
- 3, I rms: Average current for 40°C temperature rise from 25°C ambient.
- 4, Operating temperature range -40°C to +85°C.
- 5, Electrical specifications at 25°C.