

## Surface Mount Shielded Power Inductors

### Surface Mount Shielded Power Inductors TPI Series (表面接著型閉磁式功率電感-----TPI 系列)



#### Features(特徵):

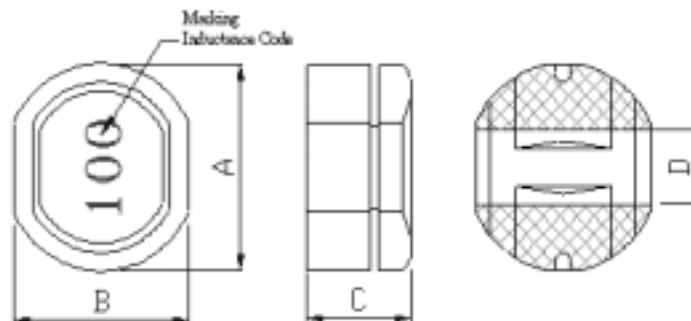
- 1, To be high saturation for surface mounting.(飽和特性佳。)
- 2, Excellent solderability and high heat resistance.(絕佳的焊錫性及高溫耐熱性。)
- 3, Excellent terminal strength construction.(絕佳的端面強度結構。)
- 4, Packed in embossed carrier tape and can be used by automatic mounting machine.(捲軸包裝，可用於自動插件機器。)

#### Applications(應用):

Excellent as VTR, OA equipment, LCD television sets, notebook PC, portable communication equipments, DC/DC converters, etc.

適用於錄影機、OA 儀器、液晶電視、筆記型電腦、小型通信機器、DC/DC 轉換器等。

#### Shape & Dimensions(外觀尺寸):



Series	A(mm)	B(mm)	C(mm)	D(mm)
TPI0502	5.80±0.30	5.20±0.30	2.80 Max	1.50 Typ.
TPI0603	6.20±0.30	5.60±0.30	3.50 Max	1.50 Typ.
TPI0705	7.80±0.30	7.00±0.30	4.90 Max	2.10 Typ.
TPI1005	10.0±0.30	9.00±0.30	5.90 Max	2.90 Typ.
TPI1205	12.50±0.50	11.50±0.50	5.90 Max	4.00 Typ.

#### Specification(規格): TPI0502 Series:

Part Number	Inductance (μH)	Test Frequency (Hz)	DC Resistance ( ) max.	Rated Current (A) Max
TPI0502-1R0M	1.00±20%	7.96MHz/1.0V	0.05	1.70
TPI0502-1R8M	1.80±20%	7.96MHz/1.0V	0.07	1.20
TPI0502-2R2M	2.20±20%	7.96MHz/1.0V	0.07	1.10
TPI0502-3R3M	3.30±20%	7.96MHz/1.0V	0.08	0.90
TPI0502-5R6M	5.60±20%	7.96MHz/1.0V	0.10	0.75
TPI0502-6R8M	6.80±20%	7.96MHz/1.0V	0.11	0.70
TPI0502-8R2M	8.20±20%	7.96MHz/1.0V	0.13	0.60
TPI0502-100M	10.0±20%	2.52MHz/1.0V	0.15	0.54
TPI0502-150M	15.0±20%	2.52MHz/1.0V	0.20	0.46
TPI0502-220M	22.0±20%	2.52MHz/1.0V	0.28	0.42
TPI0502-330M	33.0±20%	2.52MHz/1.0V	0.45	0.35
TPI0502-390M	39.0±20%	2.52MHz/1.0V	0.55	0.32
TPI0502-470M	47.0±20%	2.52MHz/1.0V	0.60	0.28
TPI0502-560M	56.0±20%	2.52MHz/1.0V	0.76	0.25
TPI0502-680M	68.0±20%	2.52MHz/1.0V	0.92	0.23

## Surface Mount Shielded Power Inductors

### TPI0603 Series:

Part Number	Inductance ( $\mu$ H)	Test Frequency (Hz)	DC Resistance ( $\Omega$ ) max.	Rated Current (A) Max
TPI0603-1R0M	1.00 $\pm$ 20%	7.96MHz/1.0V	0.05	2.60
TPI0603-1R5M	1.50 $\pm$ 20%	7.96MHz/1.0V	0.06	2.40
TPI0603-2R2M	2.20 $\pm$ 20%	7.96MHz/1.0V	0.07	2.00
TPI0603-3R3M	3.30 $\pm$ 20%	7.96MHz/1.0V	0.08	1.80
TPI0603-3R9M	3.90 $\pm$ 20%	7.96MHz/1.0V	0.09	1.70
TPI0603-4R7M	4.70 $\pm$ 20%	7.96MHz/1.0V	0.10	1.50
TPI0603-6R8M	6.80 $\pm$ 20%	7.96MHz/1.0V	0.11	1.20
TPI0603-8R2M	8.20 $\pm$ 20%	7.96MHz/1.0V	0.12	1.10
TPI0603-100M	10.0 $\pm$ 20%	2.52MHz/1.0V	0.14	1.00
TPI0603-120M	12.0 $\pm$ 20%	2.52MHz/1.0V	0.16	0.94
TPI0603-150M	15.0 $\pm$ 20%	2.52MHz/1.0V	0.18	0.86
TPI0603-180M	18.0 $\pm$ 20%	2.52MHz/1.0V	0.25	0.78
TPI0603-220M	22.0 $\pm$ 20%	2.52MHz/1.0V	0.32	0.76
TPI0603-270M	27.0 $\pm$ 20%	2.52MHz/1.0V	0.38	0.64
TPI0603-330M	33.0 $\pm$ 20%	2.52MHz/1.0V	0.41	0.61
TPI0603-390M	39.0 $\pm$ 20%	2.52MHz/1.0V	0.47	0.53
TPI0603-470M	47.0 $\pm$ 20%	2.52MHz/1.0V	0.51	0.50
TPI0603-560M	56.0 $\pm$ 20%	2.52MHz/1.0V	0.72	0.46
TPI0603-680M	68.0 $\pm$ 20%	2.52MHz/1.0V	0.82	0.42

### TPI0705 Series:

Part Number	Inductance ( $\mu$ H)	Test Frequency (Hz)	DC Resistance ( $\Omega$ ) max.	Rated Current (A) Max
TPI0705-100M	10.0 $\pm$ 20%	2.52MHz/1.0V	0.07	1.65
TPI0705-120M	12.0 $\pm$ 20%	2.52MHz/1.0V	0.07	1.57
TPI0705-150M	15.0 $\pm$ 20%	2.52MHz/1.0V	0.08	1.39
TPI0705-180M	18.0 $\pm$ 20%	2.52MHz/1.0V	0.10	1.29
TPI0705-220M	22.0 $\pm$ 20%	2.52MHz/1.0V	0.13	1.12
TPI0705-270M	27.0 $\pm$ 20%	2.52MHz/1.0V	0.16	1.06
TPI0705-330M	33.0 $\pm$ 20%	2.52MHz/1.0V	0.18	0.97
TPI0705-390M	39.0 $\pm$ 20%	2.52MHz/1.0V	0.18	0.91
TPI0705-470M	47.0 $\pm$ 20%	2.52MHz/1.0V	0.27	0.80
TPI0705-560M	56.0 $\pm$ 20%	2.52MHz/1.0V	0.29	0.78
TPI0705-680M	68.0 $\pm$ 20%	2.52MHz/1.0V	0.33	0.68
TPI0705-820M	82.0 $\pm$ 20%	2.52MHz/1.0V	0.43	0.62
TPI0705-101M	100.0 $\pm$ 20%	1.0KHz/1.0V	0.49	0.55
TPI0705-121M	120.0 $\pm$ 20%	1.0KHz/1.0V	0.68	0.49
TPI0705-151M	150.0 $\pm$ 20%	1.0KHz/1.0V	0.94	0.44
TPI0705-181M	180.0 $\pm$ 20%	1.0KHz/1.0V	1.00	0.40
TPI0705-221M	220.0 $\pm$ 20%	1.0KHz/1.0V	1.18	0.36
TPI0705-271M	270.0 $\pm$ 20%	1.0KHz/1.0V	1.30	0.33

### TPI1005 Series:

Part Number	Inductance ( $\mu$ H)	Test Frequency (Hz)	DC Resistance ( $\Omega$ ) max.	Rated Current (A) Max
TPI1005-100M	10.0 $\pm$ 20%	2.52MHz/1.0V	0.06	2.06
TPI1005-120M	12.0 $\pm$ 20%	2.52MHz/1.0V	0.07	1.94
TPI1005-150M	15.0 $\pm$ 20%	2.52MHz/1.0V	0.07	1.72
TPI1005-180M	18.0 $\pm$ 20%	2.52MHz/1.0V	0.08	1.58
TPI1005-220M	22.0 $\pm$ 20%	2.52MHz/1.0V	0.08	1.42
TPI1005-270M	27.0 $\pm$ 20%	2.52MHz/1.0V	0.10	1.32

## Surface Mount Shielded Power Inductors

### TPI1005 Series:

Part Number	Inductance ( $\mu$ H)	Test Frequency (Hz)	DC Resistance ( ) max.	Rated Current (A) Max
TPI1005-330M	33.0 $\pm$ 20%	2.52MHz/1.0V	0.11	1.16
TPI1005-390M	39.0 $\pm$ 20%	2.52MHz/1.0V	0.12	1.10
TPI1005-470M	47.0 $\pm$ 20%	2.52MHz/1.0V	0.14	1.00
TPI1005-560M	56.0 $\pm$ 20%	2.52MHz/1.0V	0.19	0.93
TPI1005-680M	68.0 $\pm$ 20%	2.52MHz/1.0V	0.21	0.85
TPI1005-820M	82.0 $\pm$ 20%	2.52MHz/1.0V	0.28	0.79
TPI1005-101M	100.0 $\pm$ 20%	1.0KHz/1.0V	0.34	0.72
TPI1005-121M	120.0 $\pm$ 20%	1.0KHz/1.0V	0.37	0.63
TPI1005-151M	150.0 $\pm$ 20%	1.0KHz/1.0V	0.51	0.55
TPI1005-181M	180.0 $\pm$ 20%	1.0KHz/1.0V	0.57	0.50
TPI1005-221M	220.0 $\pm$ 20%	1.0KHz/1.0V	0.78	0.47
TPI1005-271M	270.0 $\pm$ 20%	1.0KHz/1.0V	0.87	0.41
TPI1005-331M	330.0 $\pm$ 20%	1.0KHz/1.0V	1.20	0.37
TPI1005-391M	390.0 $\pm$ 20%	1.0KHz/1.0V	1.34	0.35
TPI1005-471M	470.0 $\pm$ 20%	1.0KHz/1.0V	1.50	0.33

### TPI1205 Series:

Part Number	Inductance ( $\mu$ H)	Test Frequency (Hz)	DC Resistance ( ) max.	Rated Current (A) Max
TPI1205-4R7M	4.70 $\pm$ 20%	7.96MHz/1.0V	0.03	3.50
TPI1205-8R2M	8.20 $\pm$ 20%	7.96MHz/1.0V	0.05	2.95
TPI1205-100M	10.0 $\pm$ 20%	2.52MHz/1.0V	0.05	2.65
TPI1205-150M	15.0 $\pm$ 20%	2.52MHz/1.0V	0.06	2.45
TPI1205-220M	22.0 $\pm$ 20%	2.52MHz/1.0V	0.07	2.20
TPI1205-330M	33.0 $\pm$ 20%	2.52MHz/1.0V	0.10	1.80
TPI1205-470M	47.0 $\pm$ 20%	2.52MHz/1.0V	0.12	1.50
TPI1205-680M	68.0 $\pm$ 20%	2.52MHz/1.0V	0.17	1.26
TPI1205-101M	100.0 $\pm$ 20%	1.0KHz/1.0V	0.25	1.05
TPI1205-121M	120.0 $\pm$ 20%	1.0KHz/1.0V	0.28	0.95
TPI1205-151M	150.0 $\pm$ 20%	1.0KHz/1.0V	0.40	0.85
TPI1205-181M	180.0 $\pm$ 20%	1.0KHz/1.0V	0.48	0.77
TPI1205-221M	220.0 $\pm$ 20%	1.0KHz/1.0V	0.52	0.70
TPI1205-271M	270.0 $\pm$ 20%	1.0KHz/1.0V	0.70	0.63
TPI1205-331M	330.0 $\pm$ 20%	1.0KHz/1.0V	0.80	0.57
TPI1205-391M	390.0 $\pm$ 20%	1.0KHz/1.0V	1.08	0.52
TPI1205-471M	470.0 $\pm$ 20%	1.0KHz/1.0V	1.20	0.48
TPI1205-561M	560.0 $\pm$ 20%	1.0KHz/1.0V	1.34	0.44
TPI1205-681M	680.0 $\pm$ 20%	1.0KHz/1.0V	1.78	0.40
TPI1205-821M	820.0 $\pm$ 20%	1.0KHz/1.0V	2.00	0.36
TPI1205-102M	1000 $\pm$ 20%	1.0KHz/1.0V	2.50	0.32

Other non standard Inductance value are available to meet your exact requirements.

#### Note:

1. Inductance measured by LCR Meter HP 4284A/HP 4286A.
2. DC Resistance measured by Milliohm meter HP4338B.
3. Rated D.C. Current: This indicates the value of current when the inductance is 20% lower than its initial value at D.C. superimposition or D.C. current when at  $t=40^{\circ}\text{C}$ , whichever is lower. ( $T_a=20^{\circ}\text{C}$ ), Test Condition: 1.0KHz/1.0V at WK3260B LCR Meter and WK3265B DC bias.