



# Power Inductors

## SMT Power Inductor Shielded - TCRH124/125/127 Series / 贴片功率电感闭磁式

### ► SMT Power Inductor Shielded Features

- Magnetically shielded construction
- Compact and thin
- Large Current and Low DCR

### ► Applications

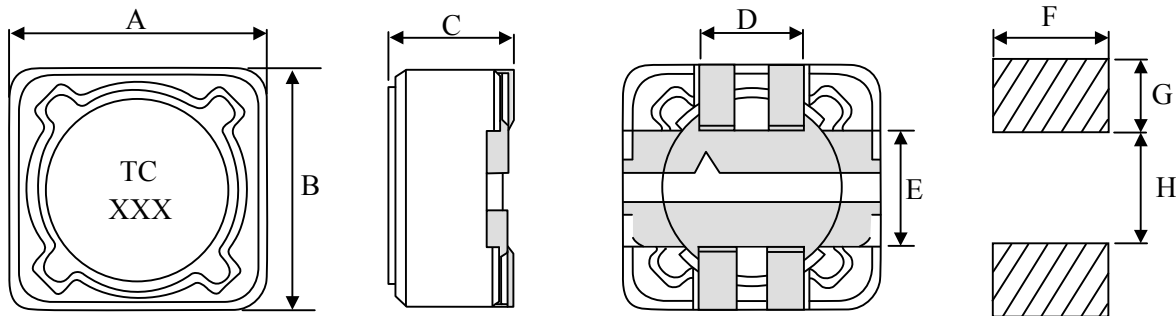
VTR, OA equipment, LCD television set, Notebook, portable communication equipments, DC/DC converters, etc..

### ► SMT Power Inductor Shielded Dimensions & Configurations (Unit In mm)

Type	A(max)	B(max)	C(max)	D ± 0.2	E ± 0.2	F	G	H
TCRH124	12.3	12.3	4.5	5.0	7.6	5.4	2.8	7.0
TCRH125	12.3	12.3	6.0	5.0	7.6	5.4	2.8	7.0
TCRH127	12.3	12.3	8.0	5.0	7.6	5.4	2.9	7.0

Note: Design as Customer's Requested Specifications.

Land Pattern



### ► Electrical Characteristics for TCRH124 Series SMT Power Inductor Shielded

Part Number	Inductance (μH)	Test Freq. (KHz)	DCR (Ω) (max)	IDC (A) (max)
TCRH124 - 3R9N	3.90	100	0.015	6.50
TCRH124 - 4R7N	4.70	100	0.018	5.70
TCRH124 - 6R8N	6.80	100	0.023	4.90
TCRH124 - 8R2N	8.20	100	0.026	4.60
TCRH124 - 100M	10.00	100	0.028	4.50
TCRH124 - 120M	12.00	100	0.038	4.00
TCRH124 - 150M	15.00	100	0.050	3.20
TCRH124 - 180M	18.00	100	0.057	3.10
TCRH124 - 220M	22.00	100	0.066	2.90
TCRH124 - 270M	27.00	100	0.080	2.80
TCRH124 - 330M	33.00	100	0.097	2.70
TCRH124 - 390M	39.00	100	0.132	2.10
TCRH124 - 470M	47.00	100	0.160	1.90
TCRH124 - 560M	56.00	100	0.190	1.80
TCRH124 - 680M	68.00	100	0.220	1.50
TCRH124 - 820M	82.00	100	0.260	1.30
TCRH124 - 101M	100.00	100	0.308	1.20
TCRH124 - 121M	120.00	100	0.380	1.10

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# Power Inductors

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Part Number	Inductance (μH)	Test Freq. (KHz)	DCR (Ω) (max)	IDC (A) (max)
TCRH124 - 151M	150.00	100	0.530	0.95
TCRH124 - 181M	180.00	100	0.620	0.85
TCRH124 - 221M	220.00	100	0.700	0.80
TCRH124 - 271M	270.00	100	0.870	0.60
TCRH124 - 331M	330.00	100	0.990	0.50

Note: Test Freq.: 100KHz / 0.1V.

Operating Temp.: -40°C ~ +85°C .

Inductance drop=25% typ. at IDC.

## ▶ Electrical Characteristics for TCRH125 Series SMT Power Inductor Shielded

Part Number	Inductance (μH)	Test Freq. (Hz)	DCR (Ω) (max)	IDC (A) (max)
TCRH125 - 1R3N	1.30	7.96M	0.012	8.00
TCRH125 - 2R1N	2.10	7.96M	0.014	7.00
TCRH125 - 3R1N	3.10	7.96M	0.017	6.00
TCRH125 - 4R4N	4.40	7.96M	0.020	5.00
TCRH125 - 5R8N	5.80	7.96M	0.021	4.40
TCRH125 - 7R5N	7.50	7.96M	0.024	4.20
TCRH125 - 100M	10.00	1K	0.025	4.00
TCRH125 - 120M	12.00	1K	0.027	3.50
TCRH125 - 150M	15.00	1K	0.030	3.30
TCRH125 - 180M	18.00	1K	0.034	3.00
TCRH125 - 220M	22.00	1K	0.036	2.80
TCRH125 - 270M	27.00	1K	0.051	2.30
TCRH125 - 330M	33.00	1K	0.057	2.10
TCRH125 - 390M	39.00	1K	0.068	2.00
TCRH125 - 470M	47.00	1K	0.075	1.80
TCRH125 - 560M	56.00	1K	0.110	1.70
TCRH125 - 680M	68.00	1K	0.120	1.50
TCRH125 - 820M	82.00	1K	0.140	1.40
TCRH125 - 101M	100.00	1K	0.160	1.30
TCRH125 - 121M	120.00	1K	0.170	1.10
TCRH125 - 151M	150.00	1K	0.230	1.00
TCRH125 - 181M	180.00	1K	0.290	0.90
TCRH125 - 221M	220.00	1K	0.400	0.80
TCRH125 - 271M	270.00	1K	0.460	0.75
TCRH125 - 331M	330.00	1K	0.510	0.68
TCRH125 - 391M	390.00	1K	0.690	0.65
TCRH125 - 471M	470.00	1K	0.770	0.58
TCRH125 - 561M	560.00	1K	0.860	0.54
TCRH125 - 681M	680.00	1K	1.200	0.48
TCRH125 - 821M	820.00	1K	1.340	0.43
TCRH125 - 102M	1000.00	1K	1.530	0.40

Note: 100~102 Test Freq.: 1KHz / 0.25V.

Operating Temp.: -40°C ~ +85°C.

Inductance drop=10% typ. at IDC.



# Power Inductors

## ► Electrical Characteristics for TCRH127 Series SMT Power Inductor Shielded

Part Number	Inductance ( $\mu$ H)	Test Freq. ( KHz )	DCR ( $\Omega$ ) (max)	IDC (A) (max)
TCRH127 - 1R2N	1.20	100	0.0070	9.80
TCRH127 - 2R4N	2.40	100	0.0115	8.00
TCRH127 - 3R5N	3.50	100	0.0135	7.50
TCRH127 - 4R7N	4.70	100	0.0158	6.80
TCRH127 - 6R1N	6.10	100	0.0176	6.60
TCRH127 - 7R6N	7.60	100	0.0200	5.90
TCRH127 - 100M	10.00	1	0.0216	5.40
TCRH127 - 120M	12.00	1	0.0243	4.90
TCRH127 - 150M	15.00	1	0.0270	4.50
TCRH127 - 180M	18.00	1	0.0392	3.90
TCRH127 - 220M	22.00	1	0.0432	3.60
TCRH127 - 270M	27.00	1	0.0459	3.40
TCRH127 - 330M	33.00	1	0.0648	3.00
TCRH127 - 390M	39.00	1	0.0729	2.75
TCRH127 - 470M	47.00	1	0.100	2.50
TCRH127 - 560M	56.00	1	0.110	2.35
TCRH127 - 680M	68.00	1	0.140	2.10
TCRH127 - 820M	82.00	1	0.160	1.95
TCRH127 - 101M	100.00	1	0.220	1.70
TCRH127 - 121M	120.00	1	0.250	1.60
TCRH127 - 151M	150.00	1	0.280	1.42
TCRH127 - 181M	180.00	1	0.350	1.30
TCRH127 - 221M	220.00	1	0.390	1.16
TCRH127 - 271M	270.00	1	0.560	1.06
TCRH127 - 331M	330.00	1	0.640	0.95
TCRH127 - 391M	390.00	1	0.700	0.88
TCRH127 - 471M	470.00	1	0.980	0.79
TCRH127 - 561M	560.00	1	1.070	0.73
TCRH127 - 681M	680.00	1	1.460	0.67
TCRH127 - 821M	820.00	1	1.640	0.60
TCRH127 - 102M	1000.00	1	1.820	0.55

Note: 1R2 ~ 7R6 Test Freq.: 100KHz / 0.1V ; 100 ~ 102 Test Freq. : 1KHz / 0.25V.

Operating Temp.: -40°C ~ +85°C.

Inductance drop=10% typ. at IDC



# Power Inductors

## ► How to Order

TCRH124 - 3R9 M

①                      ②                      ③

① SMT Power Inductor Shielded : TCRH124, TCRH125, TCRH127

### ② Inductance

Code	Inductance
1R2	1.20 $\mu$ H
100	10.00 $\mu$ H
101	100.00 $\mu$ H

### ③ Tolerance

Code	Tolerance
K	10%
L	15%
M	20%
N	30%

