

TLCDRH5D28 Series

Description:

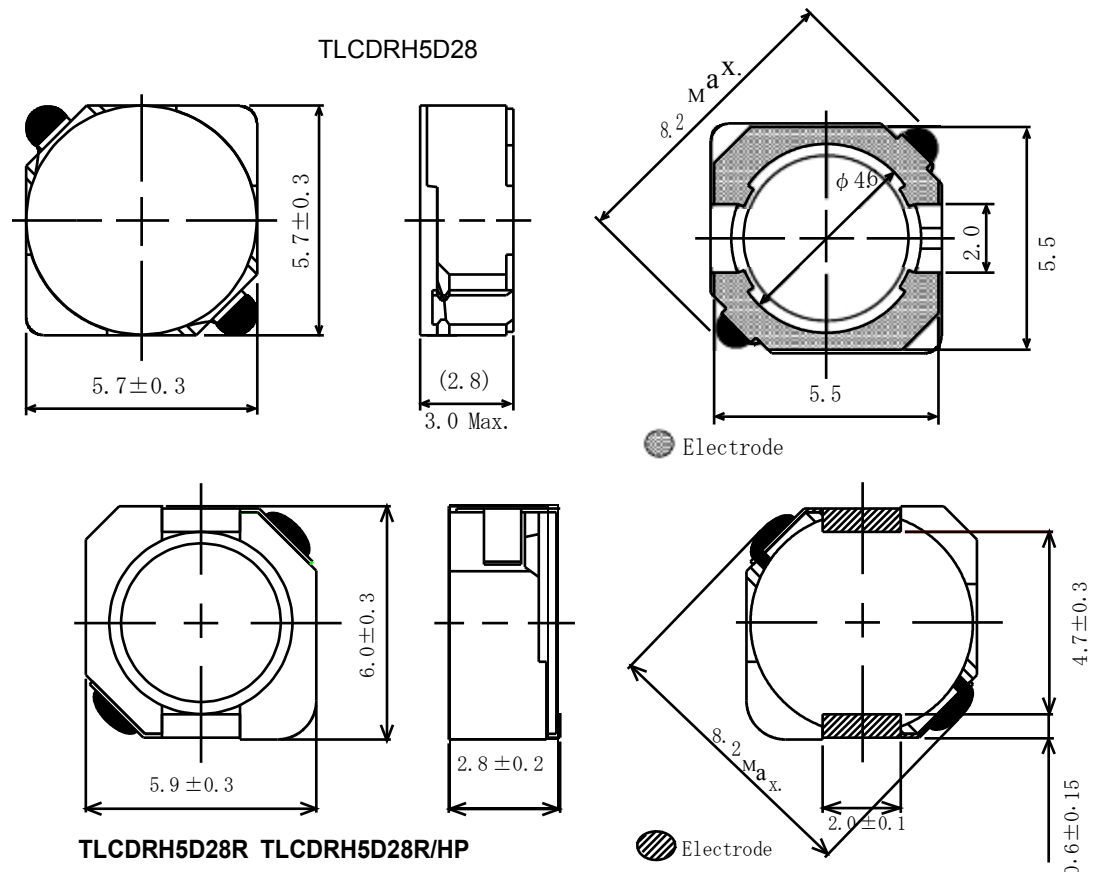
- ⚙ **Maximum height:** 3.0mm
- ⚙ **Standard inductor:** TLCDRH5D28, TLCDRH5D28R
- ⚙ **High Power inductor:** TLCDRH5D28R /HP
- ⚙ **Inductance range:** TLCDRH5D28: 2.5-100 μ H
 TLCDRH5D28R: 2.5-100 μ H
 TLCDRH5D28R/HP: 2.2- 47 μ H
- ⚙ **Rated current:** TLCDRH5D28: 0.42-2.6A
 TLCDRH5D28R: 0.4-2.6A
 TLCDRH5D28R/HP: 0.85-3.8A



Feature:

- ⚙ Magnetically shielded
- ⚙ Used in Notebook, HDD, DSC/DVC, LCD TV, DC-DC converters
- ⚙ RoHS Compliant

Dimensions (mm)



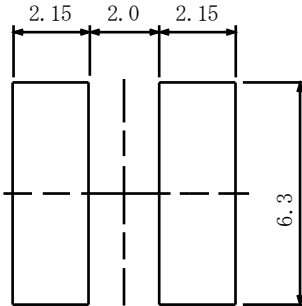


tesla
MAGNETICS INC.

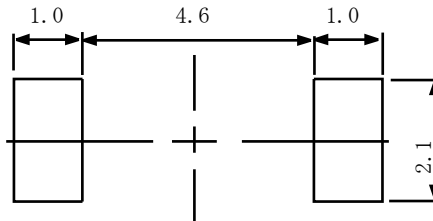


TLCDRH5D28 , TLCDRH5D28R , TLCDRH5D28R/HP

TLCDRH5D28



TLCDRH5D28R, TLCDRH5D28R/HP



TLCDRH5D28

Land Pattern (mm)

Electrical Specifications:

Part Number	Marking	Inductance (μ H) 100kHz/1V	Max. DCR (Ω Typ.) (at 20°C)	Rated current (A) 1-1*
TLCDRH5D28NP-2R5N□	2R5	$2.5 \pm 30\%$	18m (13m)	2.60
TLCDRH5D28NP-3R0N□	3R0	$3.0 \pm 30\%$	24m (18m)	2.40
TLCDRH5D28NP-4R2N□	4R2	$4.2 \pm 30\%$	31m (23m)	2.20
TLCDRH5D28NP-5R3N□	5R3	$5.3 \pm 30\%$	38m (28m)	1.90
TLCDRH5D28NP-6R2N□	6R2	$6.2 \pm 30\%$	45m (33m)	1.80
TLCDRH5D28NP-8R2N□	8R2	$8.2 \pm 30\%$	53m (39m)	1.60
TLCDRH5D28NP-100N□	100	$10 \pm 30\%$	65m (48m)	1.30
TLCDRH5D28NP-120N□	120	$12 \pm 30\%$	76m (56m)	1.20
TLCDRH5D28NP-150N□	150	$15 \pm 30\%$	103m (76m)	1.10
TLCDRH5D28NP-180N□	180	$18 \pm 30\%$	110m (82m)	1.00
TLCDRH5D28NP-220N□	220	$22 \pm 30\%$	122m (90m)	0.90
TLCDRH5D28NP-270N□	270	$27 \pm 30\%$	175m(130m)	0.85
TLCDRH5D28NP-330N□	330	$33 \pm 30\%$	189m(140m)	0.75
TLCDRH5D28NP-390N□	390	$39 \pm 30\%$	212m(157m)	0.70
TLCDRH5D28NP-470N□	470	$47 \pm 30\%$	250m(185m)	0.62
TLCDRH5D28NP-560N□	560	$56 \pm 30\%$	305m(226m)	0.58
TLCDRH5D28NP-680N□	680	$68 \pm 30\%$	355m(263m)	0.52
TLCDRH5D28NP-820N□	820	$82 \pm 30\%$	463m(343m)	0.46
TLCDRH5D28NP-101N□	101	$100 \pm 30\%$	520m(385m)	0.42

TLCDRH5D28R

Electrical Specifications

Part Number	Marking	Inductance (μ H) 100kHz/1V	Max. DCR (m Ω Typ.) (at 20°C)	Rated current (A) 1-1*
TLCDRH5D28RNP-2R5N□	2R5	$2.5 \pm 30\%$	17.6(13)	2.60
TLCDRH5D28RNP-3R3N□	3R3	$3.3 \pm 30\%$	20.3(15)	2.30
TLCDRH5D28RNP-4R0N□	4R0	$4.0 \pm 30\%$	27.0(20)	2.10
TLCDRH5D28RNP-5R0N□	5R0	$5.0 \pm 30\%$	31.1(23)	1.85
TLCDRH5D28RNP-6R0N□	6R0	$6.0 \pm 30\%$	41.9(31)	1.70
TLCDRH5D28RNP-8R0N□	8R0	$8.0 \pm 30\%$	49.9(37)	1.50
TLCDRH5D28RNP-100N□	100	$10 \pm 30\%$	54.0(40)	1.30
TLCDRH5D28RNP-120N□	120	$12 \pm 30\%$	71.6(53)	1.20
TLCDRH5D28RNP-150N□	150	$15 \pm 30\%$	82.4(61)	1.10
TLCDRH5D28RNP-180N□	180	$18 \pm 30\%$	101.5(75)	1.05
TLCDRH5D28RNP-220N□	220	$22 \pm 30\%$	119.0(88)	0.95
TLCDRH5D28RNP-270N□	270	$27 \pm 30\%$	146.0(108)	0.85
TLCDRH5D28RNP-330N□	330	$33 \pm 30\%$	182.5(135)	0.76
TLCDRH5D28RNP-390N□	390	$39 \pm 30\%$	209.5(155)	0.68
TLCDRH5D28RNP-470N□	470	$47 \pm 30\%$	229.5(170)	0.60
TLCDRH5D28RNP-560N□	560	$56 \pm 30\%$	305.0(226)	0.55
TLCDRH5D28RNP-680N□	680	$68 \pm 30\%$	351.0(260)	0.48
TLCDRH5D28RNP-820N□	820	$82 \pm 30\%$	418.5(310)	0.45
TLCDRH5D28RNP-101N□	101	$100 \pm 30\%$	520.0(385)	0.40

TLCDRH5D28R/HP

Electrical Specifications:

Part Number	Marking	Inductance (μ H) 100kHz/1V	Max. DCR (m Ω Typ.) (at 20°C)	Saturation Current (A) 1-2*		Temperature Rise current (A) 2*
				(20°C)	(105°C)	
TLCDRH5D28RHPNP-2R2N	2R2	2.2 $\pm$ 25%	24.8(19.8)	5.50	4.50	3.80
TLCDRH5D28RHPNP-3R0N	3R0	3.0 $\pm$ 25%	31.8(25.4)	4.70	3.90	3.35
TLCDRH5D28RHPNP-4R7N	4R7	4.7 $\pm$ 25%	43.1(34.5)	3.70	3.05	2.80
TLCDRH5D28RHPNP-5R6N	5R6	5.6 $\pm$ 25%	47.9(38.3)	3.30	2.65	2.70
TLCDRH5D28RHPNP-6R8N	6R8	6.8 $\pm$ 25%	61.3(49.0)	3.10	2.55	2.50
TLCDRH5D28RHPNP-8R2N	8R2	8.2 $\pm$ 25%	88.4(70.7)	2.70	2.30	1.90
TLCDRH5D28RHPNP-100M	100	10.0 $\pm$ 20%	93.0(74.4)	2.45	2.05	1.85
TLCDRH5D28RHPNP-120M	120	12.0 $\pm$ 20%	115(92.1)	2.30	2.00	1.60
TLCDRH5D28RHPNP-150M	150	15.0 $\pm$ 20%	144(115)	2.05	1.65	1.40
TLCDRH5D28RHPNP-180M	180	18.0 $\pm$ 20%	161(128)	1.90	1.55	1.35
TLCDRH5D28RHPNP-220M	220	22.0 $\pm$ 20%	213(171)	1.75	1.42	1.20
TLCDRH5D28RHPNP-270M	270	27.0 $\pm$ 20%	277(221)	1.60	1.30	1.00
TLCDRH5D28RHPNP-330M	330	33.0 $\pm$ 20%	314(251)	1.35	1.10	0.90
TLCDRH5D28RHPNP-470M	470	47.0 $\pm$ 20%	379(303)	1.20	1.00	0.85

Description

TLCDRH5D28RHPNP-180M□

☐ B Bulk
☐ C Carrier Tape

*1-1. Rated current: The DC current at which the inductance decreases to 65 % of it's nominal value or when $\Delta t=30^{\circ}\text{C}$ (TLCDRH5D28) or $\Delta t=40^{\circ}\text{C}$ (TLCDRH5D28R), whichever is lower ($T_a=20^{\circ}\text{C}$).

*1-2. Saturation current: The DC current at which the inductance decreases to 65% of it's nominal value.

*2. Temperature rise current: The DC current at which the temperature rise is $\Delta t=40^{\circ}\text{C}$. ($T_a=20^{\circ}\text{C}$).