SMD Power Inductor

CDRR7D45/T125



Description

- Ferrite drum core construction
- Magnetically shielded
- L×W×H: 7.2×7.2×4.8 mm Max.
- Product weight:0.6 g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance

Environmental Data

- Operating Temperature: -40 $^{\circ}\text{C}$ to +125 $^{\circ}\text{C}$ (including self-heating)
- Storage temperature range: -40°C~+125°C

Packaging

Carrier tape and reel packaging

Applications

High temp and high reliability automotive applications

Dimension - [mm]



*Dimension does not include the soldering joint between the coil and terminal

Recommended Land pattern - [mm]



Wire Connection









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Electrical Characteristics

Part Number	Inductance [Within] (μH) ※1	D.C.R. at 20°C [Within] (mΩ)	Saturation Current (A) Max.(Typ.) ※2	Temperature Rise Current (A) Max.(Typ.) ※3
CDRR7D45T125NP-3R3MC	3.30 ± 20%	28.00 ± 20%	3.50 (4.40)	3.20 (3.65)
CDRR7D45T125NP-4R7MC	4.70 ± 20%	31.00 ± 20%	2.80 (3.58)	2.90 (3.34)
CDRR7D45T125NP-6R8MC	6.80 ± 20%	39.00 ± 20%	2.40 (3.02)	2.45 (2.81)
CDRR7D45T125NP-100MC	10.00 ± 20%	47.00 ± 20%	1.96 (2.47)	2.25 (2.60)
CDRR7D45T125NP-150MC	15.00 ± 20%	68.00 ± 20%	1.64 (2.08)	1.85 (2.10)
CDRR7D45T125NP-220MC	22.00 ± 20%	82.00 ± 20%	1.36 (1.70)	1.60 (1.82)
CDRR7D45T125NP-330MC	33.00 ± 20%	120 ± 20%	1.21 (1.45)	1.30 (1.50)
CDRR7D45T125NP-470MC	47.00 ± 20%	180 ± 20%	0.94 (1.17)	1.10 (1.27)
CDRR7D45T125NP-680MC	68.00 ± 20%	270 ± 20%	0.78 (0.95)	0.90 (1.04)
CDRR7D45T125NP-101MC	100 ± 20%	390 ± 20%	0.62 (0.76)	0.73 (0.85)
CDRR7D45T125NP-151MC	150 ± 20%	550 ± 20%	0.52 (0.65)	0.65 (0.74)
CDRR7D45T125NP-221MC	220 ± 20%	830 ± 20%	0.44 (0.56)	0.54 (0.60)
CDRR7D45T125NP-331MC	330 ± 20%	1150 ± 20%	0.35 (0.46)	0.44 (0.50)
CDRR7D45T125NP-471MC	470 ± 20%	1800 ± 20%	0.31 (0.38)	0.36 (0.41)

%1. Inductance measuring condition: at 100 kHz.

X2. Saturation current: The value of D.C. current when the inductance decreases to 90% of it's nominal value.

3. Temperature rise current: The value of D.C. current when the temperature rise is $\Delta t = 40^{\circ}C(Ta = 20^{\circ}C)$.

Solder Reflow Condition



Note: This specification is subject to change without notice. Please contact your nearest sales office for updated information when placing an order.

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Saturation Current & Temperature Rise Graph

— L (20°C) —

____ AT



3. CDRR7D45T125NP-6R8MC

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4. CDRR7D45T125NP-100MC

5. CDRR7D45T125NP-150MC

6. CDRR7D45T125NP-220MC

1.2 1.6 2.0 2.4

9. CDRR7D45T125NP-680MC

0

0.0 0.4 0.8

7. CDRR7D45T125NP-330MC

8. CDRR7D45T125NP-470MC

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90

60

30

0

0.0

0.2

0.4

DC(A)

0,6

0.8

10. CDRR7D45T125NP-101MC

∆T(°C)

60

50

40

30

20

10

0

1.0

12. CDRR7D45T125NP-221MC

13. CDRR7D45T125NP-331MC

For sales office information, please <u>click here</u> to visit our website.

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