SMD Power Inductor
size TCDRH125/LD

1.Features

- High power ,Low DCR, high saturation .
- Magnetic shielded structure， Halogen free, lead free, RoHS compliant.
- Suitable for SMT process Operating temperature -40 ～+125 .

2. Applications

Notebook,Server,audio,netcom,
security,mobile phone,
smart home.

TCDRH 6D 38 T 125 NP - 6R8 N C
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

① Type name 形名

Dimensions 外形尺寸

Height (H) 高度尺寸

Characteristic 特性规格
L(D) Low DCR.Type低DCR类型
H(P) High Sturation Current Type高饱和电流类型
None or T Sundard Tye标准类型

Operation Temperature 使用温度

None sandnrd Tpre 标准品

125 The upperlimit ofoperatfon temperature is+125 ° (Including cols selftemperature rise)
使用温度上限+125C(包含线圈发热)

150 The upperlimit ofoperaton temperature is+150 ° (Inctuding cois selftemperature rise)
使用温度上限+150C(包含线圈发热)

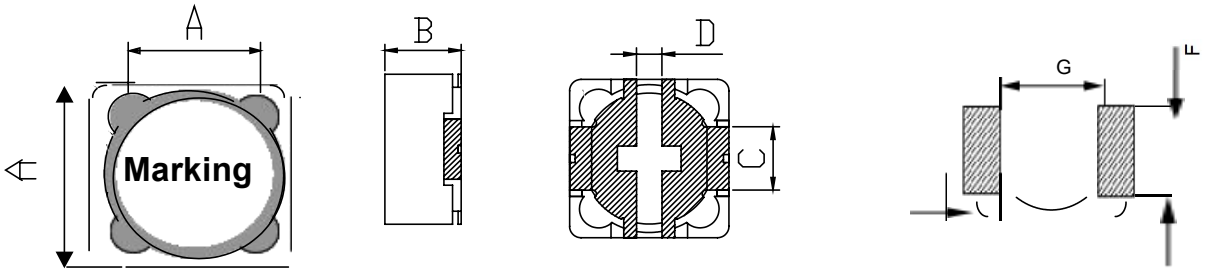
⑥Feature 分类
Lead-free NP无铅
Halogen-free 无卤素

Induetance 电感值
1R0 1.0uH 100 10uH 101 100uH

Tolerance of inductance 电感值公差
K ±10% M ±20% N ±30%

Packing 据包规格
C 载带Carier tape B 箱子 Box

EXTERNALDIMENSIONS (Unit:mm)



TYPE	A (Max)	B (Max)	C (Ref.)	D (Ref.)	E	F	G
TCDRH7D45R	7.8	4.5	2.7	1.2	1.6	3.1	4.0
TCDRH10D43R	10.5	5.0	4.6	1.6	2.3	5.0	6.6
TCDRH124	12.5	5.0	5.0	1.9	2.8	5.4	7.0
TCDRH125	12.5	6.0	5.0	1.9	2.8	5.4	7.0
TCDRH12D78E/LD	12.5	8.0	5.0	1.9	2.8	5.4	7.0
TCDRH129	12.5	10.5	5.0	1.9	2.8	5.4	7.0

ElectricalProperties:

Part No	Inductance (μH)	D.C.R.(mΩ) Max.(Typ.)at 25℃	IDC(Max) (A)
TCDRH125/LDNP-2R2MC	2.2±30%	0.015	8.50
TCDRH125/LDNP-3R3MC	3.3±30%	0.019	8.00
TCDRH125/LDNP-4R7MC	4.7±20%	0.020	7.00
TCDRH125/LDNP-6R8MC	6.8±20%	0.024	6.50
TCDRH125/LDNP-100MC	10±20%	0.030	5.00
TCDRH125/LDNP-150MC	15±20%	0.045	4.50
TCDRH125/LDNP-220MC	22±20%	0.055	3.60
TCDRH125/LDNP-330MC	33±20%	0.080	2.60
TCDRH125/LDNP-470MC	47±20%	0.120	2.20
TCDRH125/LDNP-680MC	68±20%	0.153	1.95
TCDRH125/LDNP-820MC	82±20%	0.175	1.90
TCDRH125/LDNP-101MC	100±20%	0.245	1.80
TCDRH125/LDNP-151MC	150±20%	0.320	1.30
TCDRH125/LDNP-221MC	220±20%	0.450	1.00
TCDRH125/LDNP-331MC	330±20%	0.560	0.80
TCDRH125/LDNP-471MC	470±20%	0.850	0.60
TCDRH125/LDNP-561MC	560±20%	1.100	0.58
TCDRH125/LDNP-681MC	680±20%	1.250	0.50
TCDRH125/LDNP-821MC	820±20%	1.600	0.40
TCDRH125/LDNP-102MC	1000±20%	1.900	0.30

■ All data is tested based on 25℃ ambient temperature.

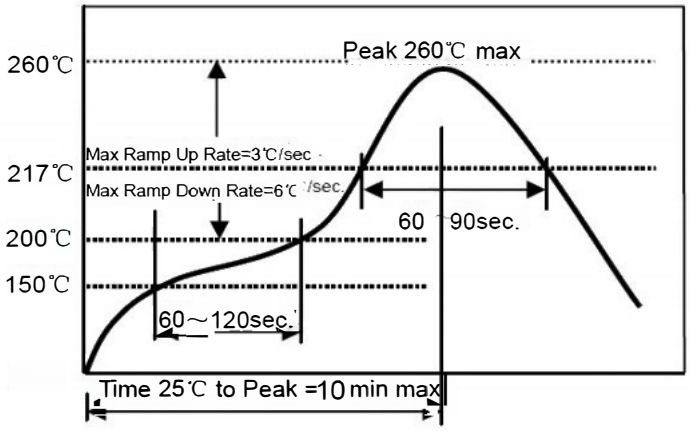
1 Inductance measure condition at 100kHz, 0.1V.

2 Saturation current: the actual value of DC current when the inductance decrease 20% of its initial value.

3 Temperature rise current :the actual value of DC current when the temperature rise is△T40℃(Ta=25℃)

· Special remind:Circuit design,component placement,PCB size and thickness,cooling system and etc.all will affect the product temperature.Please verify the product temperature in the final application.

Reflow Profile for SMT Components



Re-flowing Profile

Preheat condition: 150 ~200℃/60~120sec

Allowed time above 217℃: 80~90sec.

Max temp: 260℃

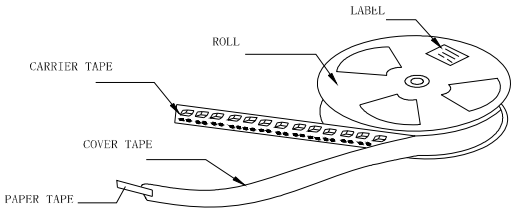
Max time at max temp: 5 sec.

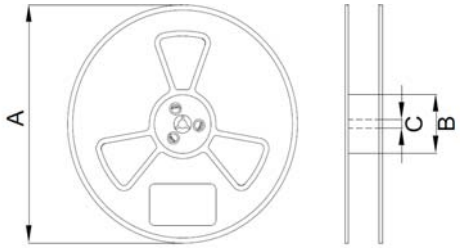
Solder paste: Sn/3.0Ag/0.5Cu

Allowed Reflow time: 2x

Reflow is reiened tostandad IPCJJEDECJSTD02OD.

Remark:
- All test data is reference to 25℃ ambient.
- Test Condition: 1MHz, 0.1Vrms
- Isat:Max.Value,DC current at which the inductance drops less than 30%from its value without current;
- Typ.Value,DC current at which the inductance drops 30%from its value without current.
- Irms: For Max.Value, △T<40℃: for Typ.Value,△T is approximate 40℃.
- Operat between temperature range-40℃to+125℃(Including self-temperature rise)
- Absolute maximum voltage:DC 70V





ProductSerie	Quantity Reel	InnerCartonQuantity
TCDRH125/LDNP	500	(500×2)=1000pcs

Type	Reel Dimension (mm)			Quantity (Pcs/Reel)
	A	B	C	
TCDRH7D45R	330	100	13	1000
TCDRH10D43R	330	100	13	750
TCDRH124	330	100	13	800
TCDRH125	330	100	13	500
TCDRH12D78E/LD	330	100	13	500
TCDRH129	330	100	13	300