

Product Specification

Number: RNP18-SMTDR1211-XXXX
Name: SMD Power Inductors
Specification: _____
Customer: _____
Date: 2024-05-17

Customer Signature:



Compile	Check	Review	Approval
Jenny	Jack.C		

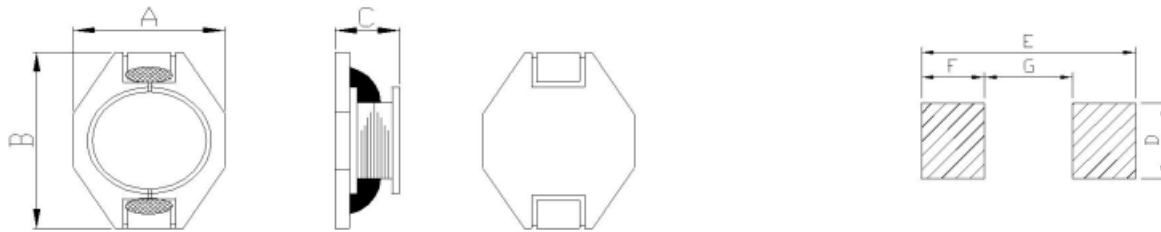
Type Name: SMTDR1211 Series

Construction/磁气构造图



Dimensions/外形尺寸图(Unit:mm)

Land patterns/贴装尺寸



Shape and Size:(Dimensions are in mm)

Type Name/型名	A	B	C	D	E	F	G	QTY(MPQ) pcs/reel 最小包装数 (个/盘)
SMTDR1205	9.4MAX	12.95MAX	5.21MAX	2.79REF	16.13REF	2.92REF	7.37REF	750
SMTDR1211	9.4MAX	12.95MAX	11.43MAX	2.79REF	16.13REF	2.92REF	7.37REF	250
SMTDR1806	15.24MAX	18.5MAX	7.11MAX	2.79REF	21.21REF	2.92REF	12.45REF	350

Specifications/规格

Type Name: SMTDR1205

Part No./品名	Inductance/电感值(μH)	Test Condition/	D.C.R./直流电阻	Saturation Current/
		测试条件	(mΩ)MAX.	饱和电流(A) ※
SMTDR1205-1R0M	1.0±20%	100KHz	9	9.00
SMTDR1205-1R5M	1.5±20%	100KHz	10	8.00
SMTDR1205-2R2M	2.2±20%	100KHz	12	7.00
SMTDR1205-3R3M	3.3±20%	100KHz	15	6.40
SMTDR1205-4R7M	4.7±20%	100KHz	18	5.40
SMTDR1205-6R8M	6.8±20%	100KHz	27	4.60
SMTDR1205-100M	10±20%	100KHz	38	3.80
SMTDR1205-150M	15±20%	100KHz	46	3.00
SMTDR1205-220M	22±20%	100KHz	85	2.30
SMTDR1205-330M	33±20%	100KHz	100	2.00
SMTDR1205-470M	47±20%	100KHz	140	1.60
SMTDR1205-680M	68±20%	100KHz	200	1.40
SMTDR1205-101K	100±10%	100KHz	280	1.20
SMTDR1205-151K	150±10%	100KHz	400	1.00
SMTDR1205-221K	220±10%	100KHz	610	0.80
SMTDR1205-331K	330±10%	100KHz	1020	0.60
SMTDR1205-471K	470±10%	100KHz	1270	0.50
SMTDR1205-681K	680±10%	100KHz	2000	0.40
SMTDR1205-102K	1000±10%	100KHz	3000	0.30
SMTDR1205-152K	1500±10%	100KHz	4480	0.29
SMTDR1205-332K	3300±10%	100KHz	8970	0.19

※ The saturation current when the inductance decreases to 75% of initial value. (Ta=25℃)

Type Name: SMTDR1211

Part No./品名	Inductance/电感值(μH)	Test Condition/	D.C.R./直流电阻	Saturation Current/
		测试条件	(mΩ)MAX.	饱和电流(A) ※
SMTDR1211-100M	10±20%	100KHz	40	8.0
SMTDR1211-150M	15±20%	100KHz	50	7.0
SMTDR1211-220M	22±20%	100KHz	66	5.5
SMTDR1211-330M	33±20%	100KHz	80	4.0
SMTDR1211-470M	47±20%	100KHz	110	3.8
SMTDR1211-680M	68±20%	100KHz	170	3.0
SMTDR1211-101K	100±10%	100KHz	220	2.5
SMTDR1211-151K	150±10%	100KHz	340	2.0
SMTDR1211-221K	220±10%	100KHz	440	1.6
SMTDR1211-331K	330±10%	100KHz	700	1.2
SMTDR1211-471K	470±10%	100KHz	950	1.0
SMTDR1211-681K	680±10%	100KHz	1150	1.0
SMTDR1211-102K	1000±10%	100KHz	2000	0.8

※ The saturation current when the inductance decreases to 75% of initial value. (Ta=25℃)

Type Name: SMTDR1806

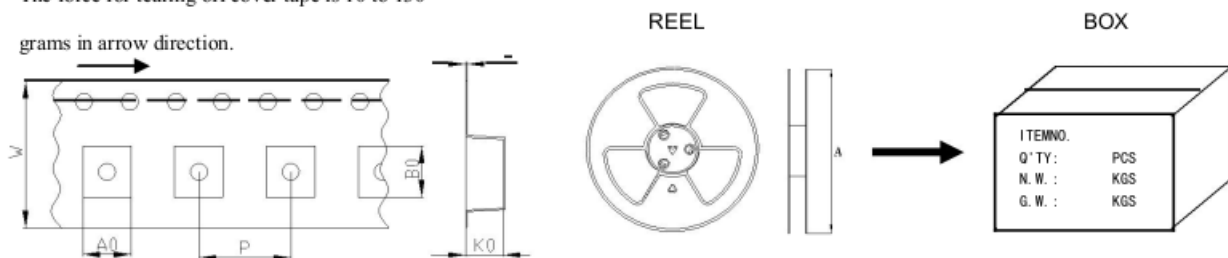
Part No./品名	Inductance/电感值(μH)	Test Condition/ 测试条件	D.C.R./直流电阻 (mΩ)MAX.	Saturation Current/ 饱和电流(A) ※
SMTDR1806-1R5M	1.5±20%	100KHz	9	27.5
SMTDR1806-2R5M	2.5±20%	100KHz	14	18.5
SMTDR1806-3R3M	3.3±20%	100KHz	18	14.5
SMTDR1806-5R6M	5.6±20%	100KHz	20	12.5
SMTDR1806-8R2M	8.2±20%	100KHz	29	10.5
SMTDR1806-100M	10±20%	100KHz	31	9.40
SMTDR1806-150M	15±20%	100KHz	36	7.50
SMTDR1806-220M	22±20%	100KHz	47	6.50
SMTDR1806-330M	33±20%	100KHz	65	5.20
SMTDR1806-470M	47±20%	100KHz	85	4.20
SMTDR1806-680M	68±20%	100KHz	130	3.70
SMTDR1806-101K	100±10%	100KHz	190	3.00
SMTDR1806-151K	150±10%	100KHz	250	2.50
SMTDR1806-221K	220±10%	100KHz	380	2.00
SMTDR1806-331K	330±10%	100KHz	600	1.70
SMTDR1806-471K	470±10%	100KHz	850	1.50
SMTDR1806-681K	680±10%	100KHz	1250	1.20
SMTDR1806-102K	1000±10%	100KHz	1800	0.95

※ The saturation current when the inductance decreases to 75% of initial value. (Ta=25℃)

Packing: Dimensions for embossed tape and reel&catron packing with packed Qty/包装载带、胶盘和外箱包装数量

The force for tearing off cover tape is 10 to 130

grams in arrow direction.

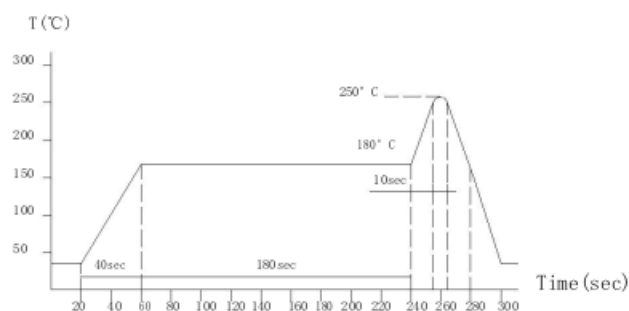


Type	DIMENSIONS (mm) /尺寸							QTY(PCS/REEL) 每卷产品数量
	A	W	P	A0	B0	K0	T	
SMTDR1205	330	24	12	9.60	13.30	5.60	0.35	750
SMTDR1211	330	24	12	9.50	13.60	11.60	0.50	250
SMTDR1806	330	32	20	15.40	18.80	7.60	0.40	350

General Characteristics

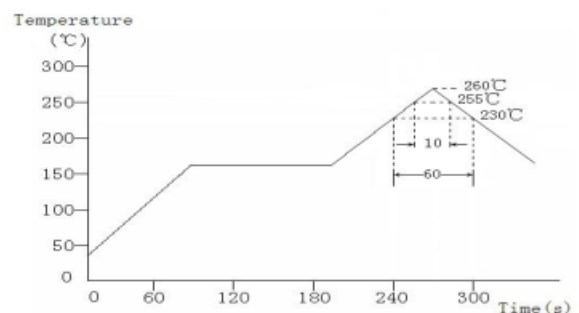
Operation Temperature	-40~+105°C(Includes temperature when the coil is heated.)
External Appearance/外观	On visual inspection, the coil has no external defects.
Terminal Strength	After soldering between copper plate and electrode. sample is pushed in three directions of X,Y and Z with force of 5N for 10±5 seconds. the terminal should not peel off.
Insulating Resistance	Over 100MΩ at 100V D.C. between coil and core.
Dielectric Strength/耐电压	No dielectric breakdown at 100V D.C. for 1 minute between coil and core.
Temperature Characteristics	Inductance coefficient(0~2,000)×10 ⁻⁶ /°C (-25~+85°C)
Humidity Characteristics	Inductance deviation within ±10%,after 96 hours in 90~95% relative humidity at 40±2°C and 1 hour drying under normal condition.
Thermal shock test	Inductance deviation within ±10%,after 20 cycles of +105°C for 30 minutes, -40°C for 30 minutes. Characteristics are measured after the ambient air exposure of 1 hour./-40°C
High temperature storage test	Inductance deviation within ±10%,after 96 hours in 105°C±2°C characteristics are measured after ambient are exposure of 1 hour. / +105°C
Low temperature storage test	Inductance deviation within ±10%,after 96 hours in -40°C±2°C characteristics are measured after ambient are exposure of 1 hour. / -40°C

Recommended Reflow Conditions (Lead-free)



The reflow condition recommended above is according to the machine used by our company. Big differences will arise as a result of the type of machine, reflow conditions, method, etc used. Hence, before setting up your reflow conditions, please confirm with the above.

Reflow Soldering Heat Endurance



No mechanical and electrical defects are found after testing based on the above profile and keeping under the conditions of room temperature and humidity for 2 hours.

Twice reflow test is acceptable with the test interval remaining 1 hour under the normal conditions.

The reflow test profile may vary with the testing instruments.