

# CDRH58D18RNP-680MC Datasheet



DiGi Electronics Part Number	CDRH58D18RNP-680MC-DG
Manufacturer	<a href="#">Sumida America Components Inc.</a>
Manufacturer Product Number	CDRH58D18RNP-680MC
Description	INDUCTOR
Detailed Description	68 $\mu$ H Shielded Drum Core Inductor 760 mA 495mOhm Nonstandard

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## Purchase and inquiry

Manufacturer Product Number:	Manufacturer:
CDRH58D18RNP-680MC	Sumida America Components Inc.
Series:	Product Status:
CDRH58D18R	Active
Type:	Material - Core:
Drum Core	Ferrite
Inductance:	Tolerance:
68 $\mu$ H	$\pm$ 20%
Current Rating (Amps):	Current - Saturation (Isat):
760 mA	450mA
Shielding:	DC Resistance (DCR):
Shielded	495mOhm
Q @ Freq:	Frequency - Self Resonant:
-	-
Ratings:	Operating Temperature:
-	-40°C ~ 125°C
Inductance Frequency - Test:	Features:
100 kHz	-
Mounting Type:	Package / Case:
Surface Mount	Nonstandard
Supplier Device Package:	Size / Dimension:
-	0.228" L x 0.228" W (5.80mm x 5.80mm)
Height - Seated (Max):	
0.079" (2.00mm)	

## Environmental & Export classification

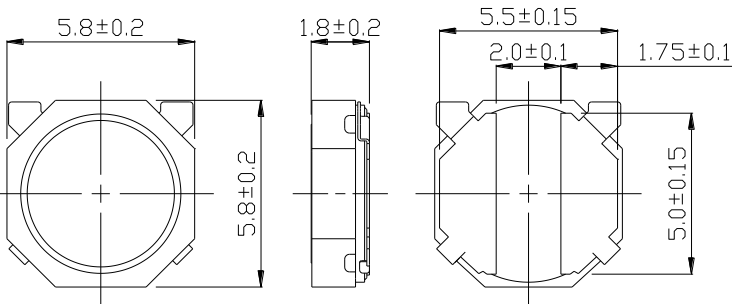
Moisture Sensitivity Level (MSL):
1 (Unlimited)

# SMD Power Inductor

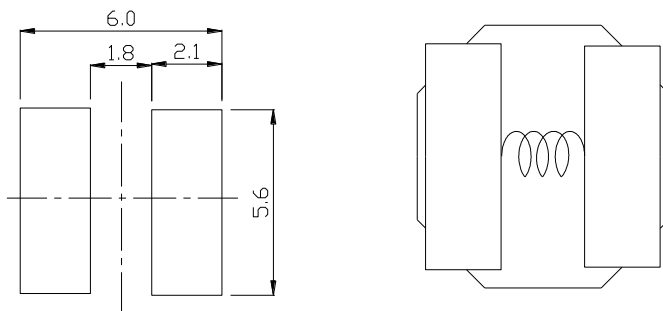
## CDRH58D18R



### Dimension - [mm]



### Land pattern and Schematics - [mm]



### Description

- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 6.0 × 6.0 × 2.0mm Max.
- Product weight: 0.24g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

### Environmental Data

- Operating temperature range:  $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$  (including coil's self temperature rise)
- Storage temperature range:  $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$
- Solder reflow temperature:  $260^{\circ}\text{C}$  peak.

### Packaging

- Carrier tape and reel packaging.
- 13.0" diameter reel
- 3000pcs per reel

### Applications

- Ideally used in DVD, camcorder, Single-lens reflex camera etc.

# SMD Power Inductor

## CDRH58D18R



### Electrical Characteristics

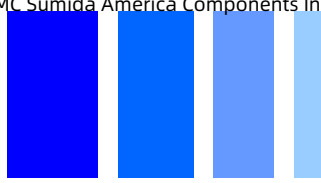
Part No.	Stamp	Inductance ( $\mu\text{H}$ ) [Within] ※1	D.C.R. (m $\Omega$ ) [Within] (at 20°C)	Saturation current (A) ※2		Temperature rise current (A) ※3
				(at 20°C)	(at 105°C)	
CDRH58D18RNP-R90NC	A	0.9 $\pm$ 30%	15 $\pm$ 25%	3.74	2.80	5.35
CDRH58D18RNP-1R5NC	B	1.5 $\pm$ 30%	18 $\pm$ 25%	2.95	2.20	4.60
CDRH58D18RNP-2R0NC	C	2.0 $\pm$ 30%	23 $\pm$ 25%	2.66	1.93	4.42
CDRH58D18RNP-3R6NC	D	3.6 $\pm$ 30%	29 $\pm$ 25%	2.03	1.47	3.65
CDRH58D18RNP-4R7MC	E	4.7 $\pm$ 20%	31 $\pm$ 25%	1.74	1.30	3.45
CDRH58D18RNP-6R8MC	F	6.8 $\pm$ 20%	50 $\pm$ 25%	1.44	1.07	2.73
CDRH58D18RNP-100MC	G	10 $\pm$ 20%	74 $\pm$ 25%	1.17	0.87	2.12
CDRH58D18RNP-150MC	H	15 $\pm$ 20%	110 $\pm$ 20%	0.95	0.70	1.75
CDRH58D18RNP-220MC	J	22 $\pm$ 20%	162 $\pm$ 20%	0.79	0.60	1.42
CDRH58D18RNP-330MC	K	33 $\pm$ 20%	224 $\pm$ 20%	0.63	0.47	1.17
CDRH58D18RNP-470MC	L	47 $\pm$ 20%	323 $\pm$ 20%	0.55	0.40	0.95
CDRH58D18RNP-680MC	M	68 $\pm$ 20%	495 $\pm$ 20%	0.45	0.33	0.76
CDRH58D18RNP-101MC	N	100 $\pm$ 20%	729 $\pm$ 20%	0.37	0.27	0.66
CDRH58D18RNP-151MC	P	150 $\pm$ 20%	1065 $\pm$ 20%	0.30	0.23	0.51
CDRH58D18RNP-221MC	Q	220 $\pm$ 20%	1675 $\pm$ 20%	0.25	0.20	0.40
CDRH58D18RNP-331MC	R	330 $\pm$ 20%	2660 $\pm$ 20%	0.21	0.16	0.32

※1. Measuring condition: at 100kHz.

※2. Saturation current: The value of D.C. current when the inductance decreases to 70% of its nominal value.

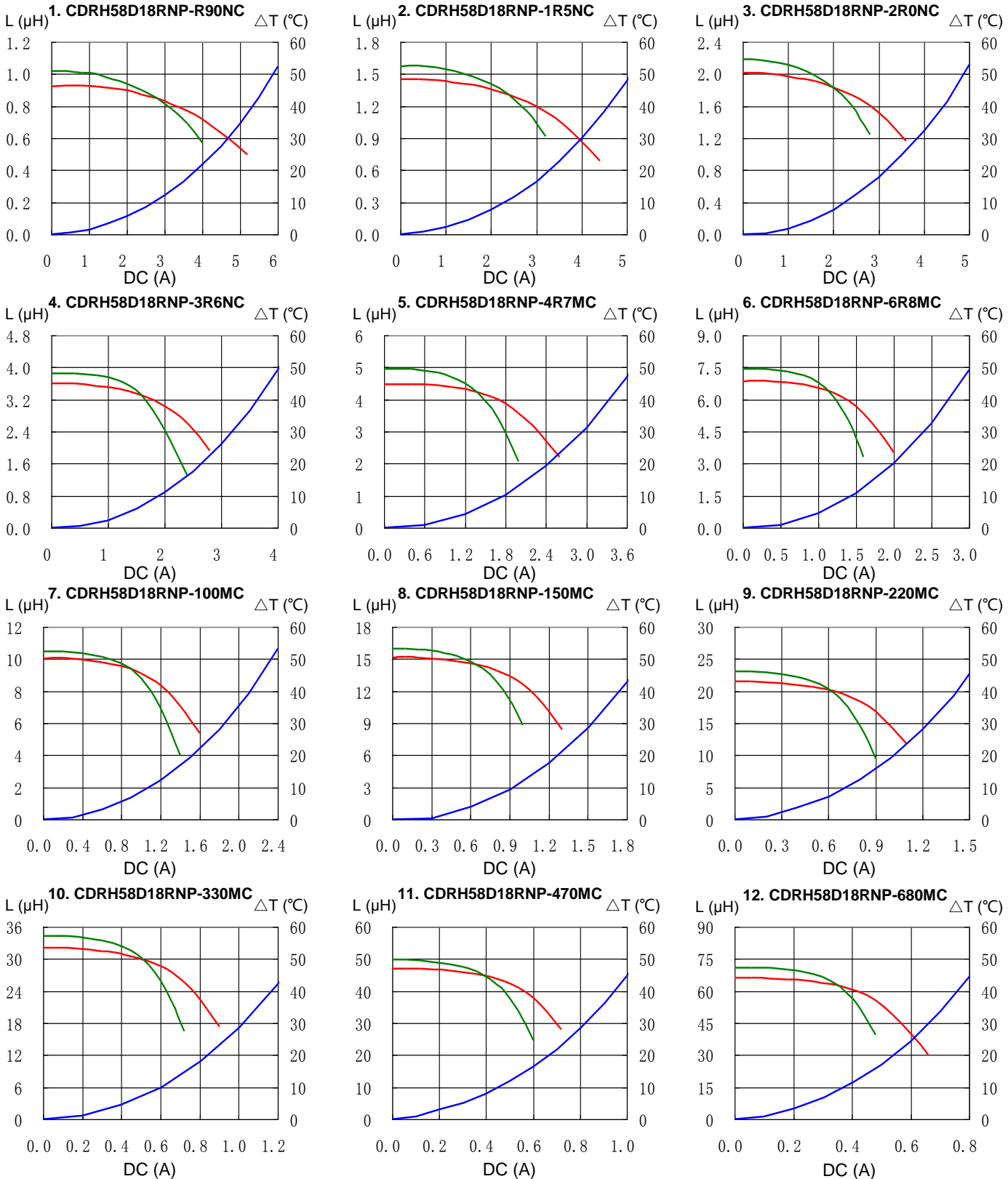
※3. Temperature rise current: The value of D.C. current when the temperature rise is  $\Delta t=40^\circ\text{C}$  ( $T_a=20^\circ\text{C}$ ).

# SMD Power Inductor CDRH58D18R

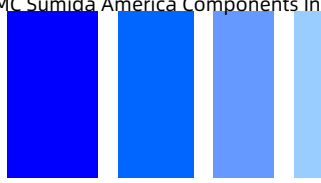


## Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) —  $\Delta T$

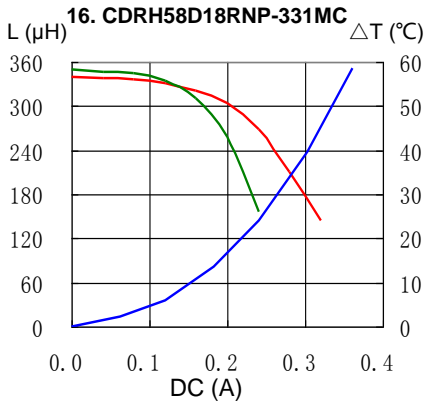
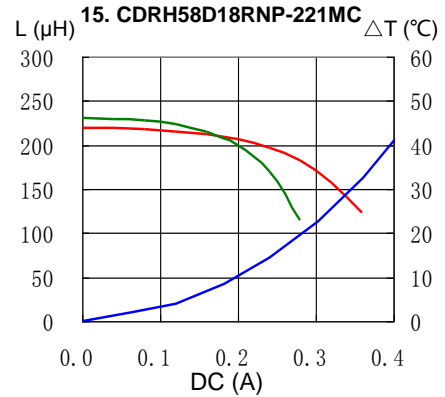
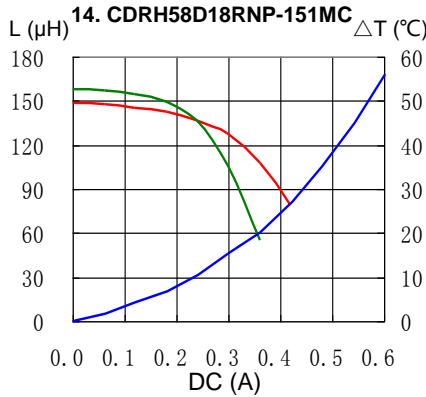
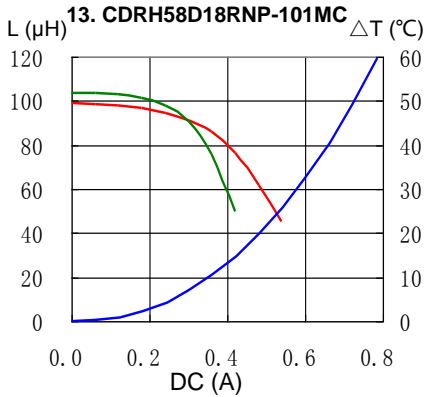


# SMD Power Inductor CDRH58D18R



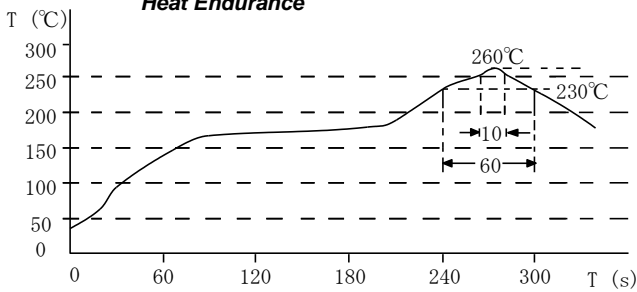
## Saturation Current & Temperature Rise Graph

— L (20°C) — L (105°C) — ΔT

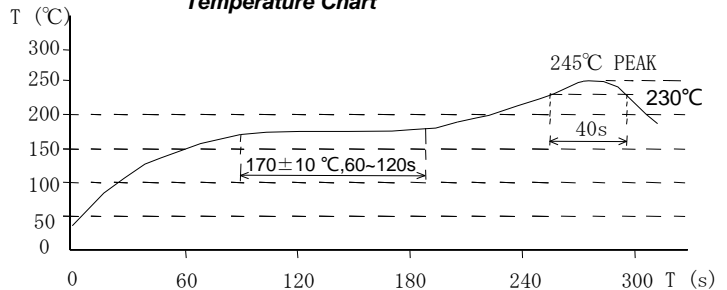


## Solder Reflow Condition

Heat Endurance



Temperature Chart



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