

# Wire Wound SMD Power Inductors – SWRH-DR Series

Operating Temperature: -40°C~+105°C (Including Self-heating)



## FEATURES

- Various high power inductors are superior to be high saturation
- Suitable for surface mounting equipment

## APPLICATIONS

- Power supply choke for small electrical equipments such as VTR, LCD display, Notebook, communication equipment, and so on.

## PRODUCT IDENTIFICATION

### SWRH

①

① Type	
SWRH	Wire Wound SMD Type Power Inductors (With Metallic Base)

### 2D11

②

② External Dimensions	
2D11~3D16	

### R

③

③ Configuration	
R	R Type Base

### -1R2

④

④ Nominal Inductance	
Example	Nominal Value
1R2	1.2μH
101	100μH

### N

⑤

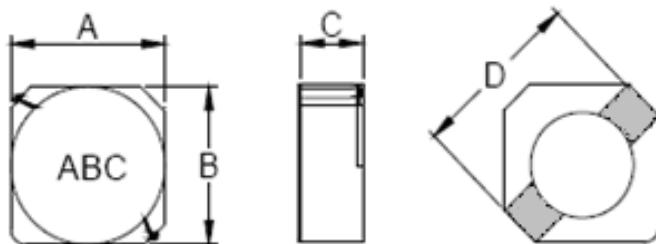
⑤ Inductance Tolerance	
M	±20%
N	±30%

### T

⑥

⑥ Packing	
T	Tape Carrier Package

## SHAPE AND DIMENSIONS



### Recommended Land Pattern



Unit: mm

Series	A max.	B max.	C max.	D typ.	I typ.	J typ.	H typ.
SWRH2D11R	3.3	3.3	1.3	4.4	1.3	1.7	1.3
SWRH2D14R	3.3	3.3	1.6	4.4	1.3	1.7	1.3
SWRH2D18R	3.3	3.3	2.1	4.4	1.3	1.7	1.3
SWRH3D11R	4.2	4.2	1.3	5.5	1.4	2.4	1.5
SWRH3D14R	4.2	4.2	1.6	5.5	1.4	2.4	1.5
SWRH3D16R	4.2	4.2	1.8	5.5	1.4	2.4	1.5

## SPECIFICATIONS

### SWRH2D11R

Part Number	Inductance	L Test Condition	Max. DC Resistance	Max. Rated Current
Units	$\mu\text{H}$	Hz, V	$\Omega$	A
Symbol	L	-	DCR	$I_r$
SWRH2D11R-1R2NT	1.2 $\pm$ 30%	100k, 0.3V	0.068	0.90
SWRH2D11R-2R2NT	2.2 $\pm$ 30%	100k, 0.3V	0.098	0.78
SWRH2D11R-3R3NT	3.3 $\pm$ 30%	100k, 0.3V	0.123	0.60
SWRH2D11R-4R7NT	4.7 $\pm$ 30%	100k, 0.3V	0.170	0.50
SWRH2D11R-6R8NT	6.8 $\pm$ 30%	100k, 0.3V	0.260	0.44
SWRH2D11R-100MT	10 $\pm$ 20%	1k, 0.3V	0.400	0.35

### SWRH2D14R

Part Number	Inductance	L Test Condition	Max. DC Resistance	Max. Rated Current
Units	$\mu\text{H}$	Hz, V	$\Omega$	A
Symbol	L	-	DCR	$I_r$
SWRH2D14R-1R5NT	1.5 $\pm$ 30%	100k, 0.3V	0.063	1.80
SWRH2D14R-1R8NT	1.8 $\pm$ 30%	100k, 0.3V	0.075	1.65
SWRH2D14R-2R2NT	2.2 $\pm$ 30%	100k, 0.3V	0.094	1.50
SWRH2D14R-2R7NT	2.7 $\pm$ 30%	100k, 0.3V	0.106	1.35
SWRH2D14R-3R3NT	3.3 $\pm$ 30%	100k, 0.3V	0.125	1.20
SWRH2D14R-3R9NT	3.9 $\pm$ 30%	100k, 0.3V	0.138	1.10
SWRH2D14R-4R7NT	4.7 $\pm$ 30%	100k, 0.3V	0.169	1.00
SWRH2D14R-5R6NT	5.6 $\pm$ 30%	100k, 0.3V	0.188	0.95
SWRH2D14R-6R8NT	6.8 $\pm$ 30%	100k, 0.3V	0.213	0.85
SWRH2D14R-8R2NT	8.2 $\pm$ 30%	100k, 0.3V	0.281	0.80
SWRH2D14R-100MT	10 $\pm$ 20%	1k, 0.3V	0.294	0.70
SWRH2D14R-120MT	12 $\pm$ 20%	1k, 0.3V	0.394	0.62

### SWRH2D18R

Part Number	Inductance	L Test Condition	Max. DC Resistance	Max. Rated Current
Units	$\mu\text{H}$	Hz, V	$\Omega$	A
Symbol	L	-	DCR	$I_r$
SWRH2D18R-2R2NT	2.2 $\pm$ 30%	100k, 0.3V	0.041	0.85
SWRH2D18R-3R3NT	3.3 $\pm$ 30%	100k, 0.3V	0.054	0.75
SWRH2D18R-4R7NT	4.7 $\pm$ 30%	100k, 0.3V	0.078	0.63
SWRH2D18R-6R8NT	6.8 $\pm$ 30%	100k, 0.3V	0.106	0.52
SWRH2D18R-100MT	10 $\pm$ 20%	1k, 0.3V	0.180	0.43
SWRH2D18R-150MT	15 $\pm$ 20%	1k, 0.3V	0.220	0.35
SWRH2D18R-220MT	22 $\pm$ 20%	1k, 0.3V	0.320	0.30
SWRH2D18R-330MT	33 $\pm$ 20%	1k, 0.3V	0.460	0.24
SWRH2D18R-470MT	47 $\pm$ 20%	1k, 0.3V	0.660	0.20

### SWRH3D11R

Part Number	Inductance	L Test Condition	Max. DC Resistance	Max. Rated Current
Units	$\mu\text{H}$	Hz, V	$\Omega$	A
Symbol	L	-	DCR	$I_r$
SWRH3D11R-2R7NT	2.7 $\pm$ 30%	100k, 0.3V	0.078	0.50
SWRH3D11R-3R3NT	3.3 $\pm$ 30%	100k, 0.3V	0.099	0.45
SWRH3D11R-4R7NT	4.7 $\pm$ 30%	100k, 0.3V	0.123	0.40
SWRH3D11R-6R8NT	6.8 $\pm$ 30%	100k, 0.3V	0.180	0.34
SWRH3D11R-8R2NT	8.2 $\pm$ 30%	100k, 0.3V	0.204	0.32

## SPECIFICATIONS

### SWRH3D11R

Part Number	Inductance	L Test Condition	Max. DC Resistance	Max. Rated Current
Units	μH	Hz, V	Ω	A
Symbol	L	-	DCR	I <sub>r</sub>
SWRH3D11R-100MT	10±20%	1k, 0.3V	0.240	0.28
SWRH3D11R-120MT	12±20%	1k, 0.3V	0.276	0.25
SWRH3D11R-150MT	15±20%	1k, 0.3V	0.372	0.23
SWRH3D11R-180MT	18±20%	1k, 0.3V	0.468	0.21
SWRH3D11R-270MT	27±20%	1k, 0.3V	0.726	0.17
SWRH3D11R-330MT	33±20%	1k, 0.3V	0.822	0.15
SWRH3D11R-390MT	39±20%	1k, 0.3V	0.942	0.14

### SWRH3D14R

Part Number	Inductance	L Test Condition	Max. DC Resistance	Max. Rated Current
Units	μH	Hz, V	Ω	A
Symbol	L	-	DCR	I <sub>r</sub>
SWRH3D14R-1R5NT	1.5±30%	100k, 0.3V	0.055	1.85
SWRH3D14R-1R7NT	1.7±30%	100k, 0.3V	0.063	1.85
SWRH3D14R-2R2NT	2.2±30%	100k, 0.3V	0.069	1.60
SWRH3D14R-2R7NT	2.7±30%	100k, 0.3V	0.088	1.45
SWRH3D14R-3R3NT	3.3±30%	100k, 0.3V	0.100	1.35
SWRH3D14R-3R9NT	3.9±30%	100k, 0.3V	0.135	1.15
SWRH3D14R-4R7NT	4.7±30%	100k, 0.3V	0.150	1.10
SWRH3D14R-6R8NT	6.8±30%	100k, 0.3V	0.190	1.00
SWRH3D14R-8R2NT	8.2±30%	100k, 0.3V	0.238	0.82
SWRH3D14R-100MT	10±20%	1k, 0.3V	0.262	0.75
SWRH3D14R-120MT	12±20%	1k, 0.3V	0.350	0.67
SWRH3D14R-150MT	15±20%	1k, 0.3V	0.488	0.60
SWRH3D14R-220MT	22±20%	1k, 0.3V	0.575	0.52

### SWRH3D16R

Part Number	Inductance	L Test Condition	Max. DC Resistance	Max. Rated Current
Units	μH	Hz, V	Ω	A
Symbol	L	-	DCR	I <sub>r</sub>
SWRH3D16R-1R5NT	1.5±30%	100k, 0.3V	0.052	1.55
SWRH3D16R-2R2NT	2.2±30%	100k, 0.3V	0.072	1.20
SWRH3D16R-3R3NT	3.3±30%	100k, 0.3V	0.085	1.10
SWRH3D16R-4R7NT	4.7±30%	100k, 0.3V	0.105	0.90
SWRH3D16R-6R8NT	6.8±30%	100k, 0.3V	0.170	0.73
SWRH3D16R-8R2NT	8.2±30%	100k, 0.3V	0.190	0.65
SWRH3D16R-100MT	10±20%	1k, 0.3V	0.210	0.55
SWRH3D16R-150MT	15±20%	1k, 0.3V	0.295	0.45
SWRH3D16R-220MT	22±20%	1k, 0.3V	0.430	0.40
SWRH3D16R-330MT	33±20%	1k, 0.3V	0.660	0.32

※1: All test data is referenced to 20°C ambient;

※2: The maximum rated current is a DC current which causes initial inductance to decrease by 35% or temperature to rise by 40°C, which is smaller (at ambient reference temperature: 20°C)