

### Features :

- ◆ Inductance values from 5.5 nH up to 27.3 nH.
- ◆ Excellent Quality Factor - up to 130.
- ◆ High self-resonant frequency.
- ◆ Ultra-miniature size, high currents up to 4.4 Amps.
- ◆ Flat top and bottom for reliable pick and place and mechanical stability.
- ◆ All value availbale in 2%, 5% tolerance.
- ◆ Ag-solder coated leads ensure reliable soldering.

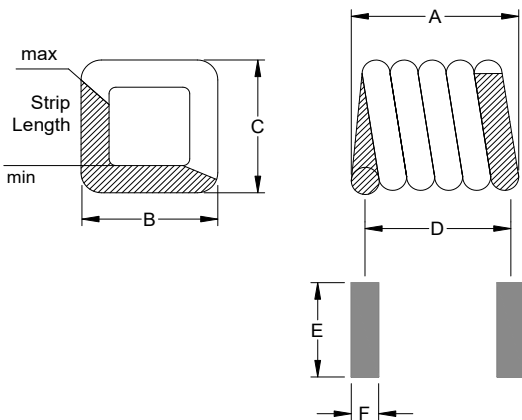
### Environmental Data :

- ◆ Operating temperature:  $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$ , (Including coil's self temperature rise).
- ◆ Ambient temperature:  $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$ . (referring to  $I_{\text{rms}}$ )
- ◆ Storage temperature(on tape & reel packing):  $-40^{\circ}\text{C} \sim +80^{\circ}\text{C}$ ; 75% RH max.
- ◆ RoHS compliance ,Halogen free available.  $260^{\circ}\text{C}$  compatible.

### Applications :

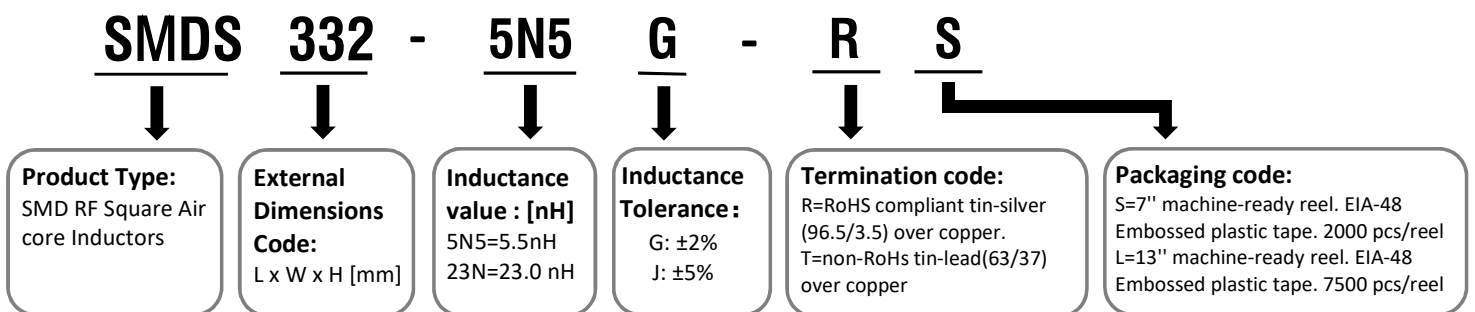
- ◆ Especially for RF applications.
- ◆ Ideal for high current applications.
- ◆ Broad band filter.
- ◆ RF-Decoupling.

### Dimensions & Recommended Land Pattern : [mm]



Part number	A $\pm 0.15$	B $\pm 0.15$	C $\pm 0.15$	D	E	F	Weight (mg)
SMDS328-5N5	1.35	1.83	1.40	0.96	2.60	0.51	9.9
SMDS328-6N0	1.30	1.83	1.40	0.99	2.60	0.51	8.5
SMDS328-8N9	1.63	1.83	1.40	1.27	2.60	0.51	10.8
SMDS328-12N	1.93	1.83	1.40	1.63	2.60	0.51	13.6
SMDS328-16N	2.29	1.83	1.40	1.96	2.60	0.51	16.1
SMDS328-19N	2.59	1.83	1.40	2.3	2.60	0.51	18.7
SMDS330-6N9	1.30	1.83	1.52	1.02	2.60	0.51	9.1
SMDS330-10N	1.63	1.83	1.52	1.32	2.60	0.51	11.5
SMDS330-11N	1.55	1.83	1.52	1.24	2.60	0.51	11.5
SMDS330-14N	1.93	1.83	1.52	1.57	2.60	0.51	14.0
SMDS330-17N	2.29	1.83	1.52	1.93	2.60	0.51	16.8
SMDS330-22N	2.59	1.83	1.52	2.30	2.60	0.51	19.4
SMDS332-8N1	1.47	2.14	1.83	1.12	2.80	0.64	12.8
SMDS332-12N	1.85	2.14	1.83	1.45	2.80	0.64	16.9
SMDS332-14N	1.55	2.14	1.83	1.24	2.80	0.64	13.5
SMDS332-17N	2.21	2.14	1.83	1.83	2.80	0.64	21.1
SMDS332-22N	2.56	2.14	1.83	2.18	2.80	0.64	24.7
SMDS332-23N	2.24	2.14	1.83	1.90	2.80	0.64	19.2
SMDS332-25N	2.97	2.14	1.83	2.57	2.80	0.64	27.6
SMDS332-27N	2.97	2.14	1.83	2.57	2.80	0.64	28.7

### Product Identification :



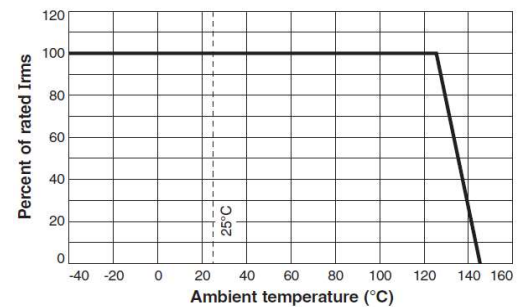
### Electrical Specification :

Part Number	Inductance <sup>①</sup> L (nH)	Tol. <sup>②</sup> ±%	Q <sup>③</sup> typ	SRF <sup>④</sup> typ (GHz)	DCR max (mΩ)	Irms <sup>⑤</sup> (A)
SMDS328-5N5_-R_	5.5	<b>5, 2</b>	60	4.9	3.4	2.9
SMDS328-6N0_-R_	6.0	<b>5, 2</b>	64	5.2	6.0	2.9
SMDS328-8N9_-R_	8.9	<b>5, 2</b>	90	4.3	7.0	2.9
SMDS328-12N_-R_	12.	<b>5, 2</b>	90	4.8	8.0	2.9
SMDS328-16N_-R_	15.7	<b>5, 2</b>	90	4.4	9.0	2.9
SMDS328-19N_-R_	19.4	<b>5, 2</b>	90	4.0	10.0	2.9
SMDS330-6N9_-R_	6.9	<b>5, 2</b>	100	4.6	6.0	2.7
SMDS330-10N_-R_	10.2	<b>5, 2</b>	100	4.0	7.0	2.7
SMDS330-11N_-R_	11.2	<b>5, 2</b>	90	3.6	6.3	2.7
SMDS330-14N_-R_	13.7	<b>5, 2</b>	100	4.3	8.0	2.7
SMDS330-17N_-R_	17.0	<b>5, 2</b>	100	4.0	9.0	2.7
SMDS330-22N_-R_	22.0	<b>5, 2</b>	100	3.5	10.0	2.7
SMDS332-8N1_-R_	8.1	<b>5, 2</b>	130	5.2	6.0	4.4
SMDS332-12N_-R_	12.1	<b>5, 2</b>	130	4.3	7.0	4.4
SMDS332-14N_-R_	14.7	<b>5, 2</b>	90	3.0	7.2	4.4
SMDS332-17N_-R_	16.6	<b>5, 2</b>	130	3.4	8.0	4.4
SMDS332-22N_-R_	21.5	<b>5, 2</b>	130	3.7	9.0	4.4
SMDS332-23N_-R_	23.0	<b>5, 2</b>	130	2.6	10.0	4.4
SMDS332-25N_-R_	25.0	<b>5, 2</b>	130	2.5	10.0	4.4
SMDS332-27N_-R_	27.3	<b>5, 2</b>	130	3.2	10.0	4.4



1. Inductance measured at 400MHz, 0.1Vrms, 0 A using HP4287A LCR meter or equivalent with 9699 test fixture.
2. Inductance tolerance in bold are stocked for shipment.
3. Q measured at 400MHz, using HP4287A LCR meter or equivalent.
4. SRF measured using HP8753 network analyzer and SMD test fixture.
5. Current that causes a 20°C temperature rise from 25°C ambient.
6. Electrical specification at 25°C ambient.
7. **Resistance to soldering heat** : Max three 40s reflows at 260°C, parts cooled to room temperature between cycles.
8. **Temperature Coefficient of Inductance** : +5 to +70ppm/°C.

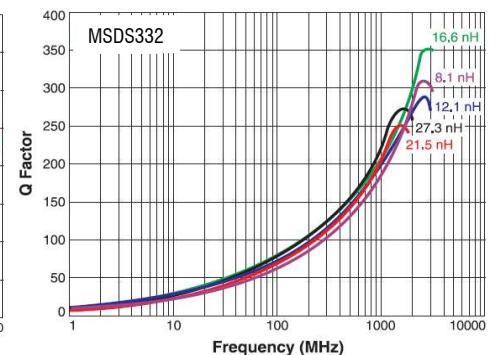
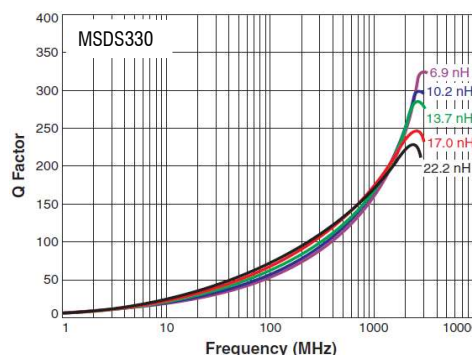
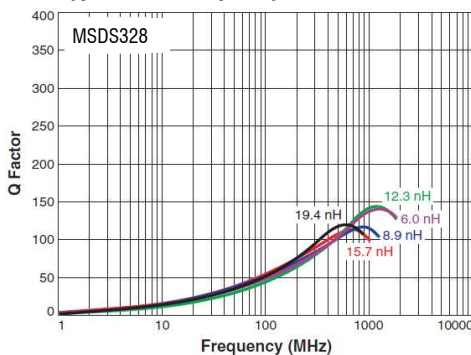
### Irms Derating



\* Custom design are available upon requested.

### Electrical Characteristic Curve :

#### Typical Q vs Frequency



#### Typical L vs Frequency

