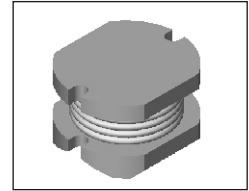


# SMT Power Inductor

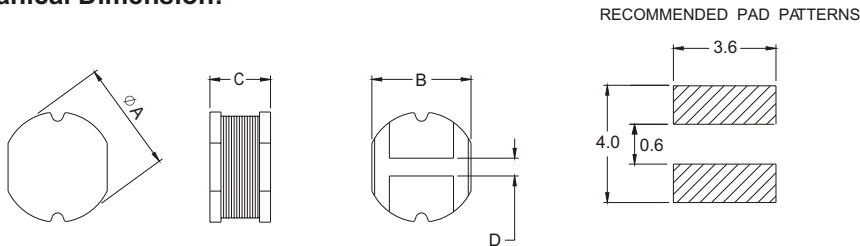
## SI43 Type

### Features

- RoHS compliant.
- Low profile (2.5mm max. height) SMD type.
- Unshielded.
- Self-leads, suitable for high density mounting.
- High energy storage and low DCR.
- Provided with embossed carrier tape packing.
- Ideal for power source circuits, DC-DC converter, DC-AC inverters inductor applications.
- In addition to the standard versions shown here, customized inductors are available to meet your exact requirements.



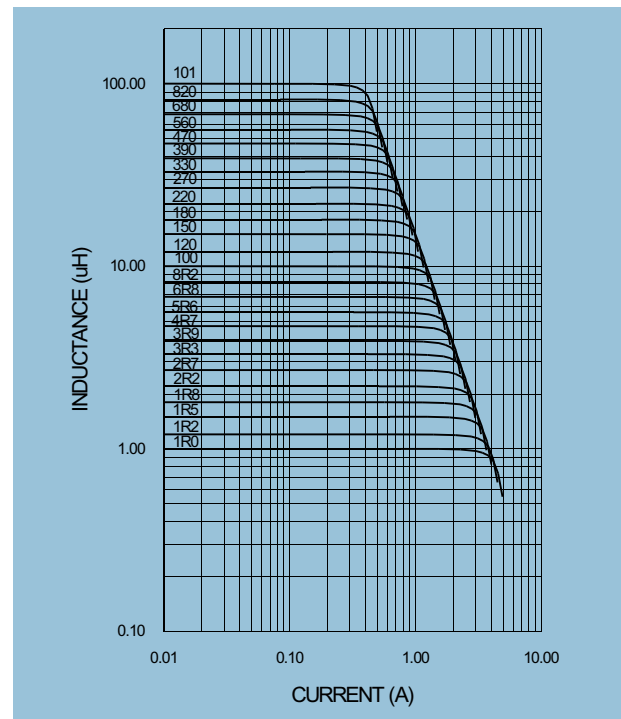
### Mechanical Dimension:



UNIT:mm/inch  
 A =  $3.5 \pm 0.2 / 0.138 \pm 0.008$   
 B =  $3.1 \pm 0.2 / 0.122 \pm 0.008$   
 C =  $2.5 / 0.098$  Max.  
 D =  $0.8 \pm 0.2 / 0.031 \pm 0.008$

### Electrical Characteristics: 25°C, 100KHz, 0.1V

PART NO.	L <sup>1</sup> (uH)	SI43			SI43A		
		DCR (mΩ) MAX	Isat <sup>2</sup> (A dc)	I <sub>r</sub> <sup>3</sup> (A dc)	DCR (mΩ) MAX	Isat <sup>2</sup> (A dc)	I <sub>r</sub> <sup>3</sup> (A dc)
R22	0.22				5.8	5.60	5.60
R75	0.75				18.5	3.20	3.20
1R0	1.00	46	3.00	1.95	25.0	2.60	2.60
1R2	1.20	60	2.70	1.70	32.0	2.30	2.30
1R5	1.50	68	2.40	1.60	41.0	2.06	2.06
1R8	1.80	75	2.20	1.50	49.0	1.86	1.86
2R2	2.20	90	2.00	1.40	54.0	1.70	1.70
2R7	2.70	105	1.80	1.30	66.0	1.57	1.57
3R3	3.30	125	1.70	1.20	78.0	1.35	1.35
3R9	3.90	145	1.60	1.10	92.0	1.26	1.26
4R7	4.70	180	1.40	1.00	100.0	1.19	1.19
5R6	5.60	200	1.30	0.95	127.0	1.06	1.06
6R8	6.80	250	1.20	0.85	156.0	1.00	1.00
8R2	8.20	280	1.05	0.80	186.0	0.87	0.87
100	10.00	310	0.95	0.75	226.0	0.80	0.80
120	12.00	440	0.87	0.64	251.0	0.74	0.74
150	15.00	480	0.78	0.60	316.0	0.66	0.66
180	18.00	580	0.71	0.56	410.0	0.60	0.60
220	22.00	630	0.64	0.53	462.0	0.53	0.53
270	27.00	840	0.58	0.46	612.0	0.48	0.48
330	33.00	1175	0.52	0.39	821.0	0.44	0.44
390	39.00	1280	0.48	0.37	905.0	0.40	0.40
470	47.00	1493	0.44	0.35	1040.0	0.36	0.36
560	56.00	1670	0.40	0.31	1330.0	0.33	0.33
680	68.00	1907	0.36	0.30	1872.0	0.31	0.31
820	82.00	2568	0.33	0.24	2112.0	0.27	0.27
101	100.00	3030	0.30	0.23	2300.0	0.25	0.25



1. Tolerance of inductance:  $\pm 15\%$  for 1.0~8.2uH,  $\pm 10\%$  for 10~100uH.
2. Isat is the DC current which cause the inductance drop less than 10% of its nominal inductance without current.
3. Ir is the DC current which cause the surface temperature of the part increase less than 45°C.
4. Operating temperature : -20°C to 105°C (including self-temperature rise).



**DELTA ELECTRONICS, INC.**

(TAOYUAN PLANT CPBG) 252, SAN YING ROAD, KUEISAN INDUSTRIAL ZONE, TAOYUAN SHIEN, 333, TAIWAN, R.O.C.

TEL: 886-3-3591968; FAX: 886-3-3591991

<http://www.deltaww.com>