## **SMT Power Inductors - DS5022 Series**

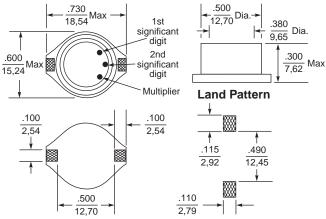


The DS5022 Series is a family of magnetically shielded power inductors designed for the higher current requirements of portable computers, video recorders and other DC-DC conversion applications.

They feature saturation current ratings as high as 8 Amps and rms current ratings up to 3.9 Amps. Low DC resistance (as low as .035 Ohms) keeps power losses to a minimum.

Designed specifically for surface mounting, the DS5022 has a flat top for reliable pick and place operations. The terminals wrap around the end of the base to ensure a sound solder fillet and simplify inspection.

Coilcraft **Designer's Kit C117** contains samples of each of the standard parts shown. To order, contact Coilcraft or visit http://order.coilcraft.com.



Parts/reel: 13" 250 Tape width: 32 mm
For packaging data see "Tape and Reel Specifications" section (Doc. 173)

L ± 20% <sup>1</sup> (µH)	DCR max (Ohms)	SRF typ (MHz)	Isat² (A)	Irms³ (A)
10	.040	30	8.0	3.9
15	.048	20	7.0	3.4
22	.059	18	6.0	3.1
33	.075	14	5.0	2.8
47	.097	10	4.0	2.4
68	.138	9	3.0	2.0
100	.207	7	2.4	1.7
150	.293	6	2.1	1.3
220	.47	5	1.9	1.1
330	.78	4	1.1	0.86
470	1.08	3	1.1	0.73
680	1.40	2.5	0.96	0.64
1000	2.01	2	0.80	0.53
	(μH)  10 15 22 33 47 68 100 150 220 330 470 680	(μH) (Ohms)  10 .040 15 .048 22 .059 33 .075 47 .097 68 .138 100 .207 150 .293 220 .47 330 .78 470 1.08 680 1.40	10 .040 30 15 .048 20 22 .059 18 33 .075 14 47 .097 10 68 .138 9 100 .207 7 150 .293 6 220 .47 5 330 .78 4 470 1.08 3 680 1.40 2.5	(μH) (Ohms) (MHz) (A)  10 .040 30 8.0 15 .048 20 7.0 22 .059 18 6.0 33 .075 14 5.0 47 .097 10 4.0  68 .138 9 3.0 100 .207 7 2.4 150 .293 6 2.1 220 .47 5 1.9 330 .78 4 1.1  470 1.08 3 1.1 680 1.40 2.5 0.96

For environmental data see "Product Specifications" (Document 164).

- 1. Inductance tested at 0.1 Vrms, 100 kHz
- 2. Inductance drop 10% typ. at Isat
- 3. 40° rise typ. at Irms
- 4. Operating temperature range -40° C to +85° C
- 5. Electrical specifications at 25° C

