

# SMT Power Inductors – DO5022 Series



This series of surface mount power inductors is designed for the higher current requirements of the Pentium Pro and other portable and handheld devices.

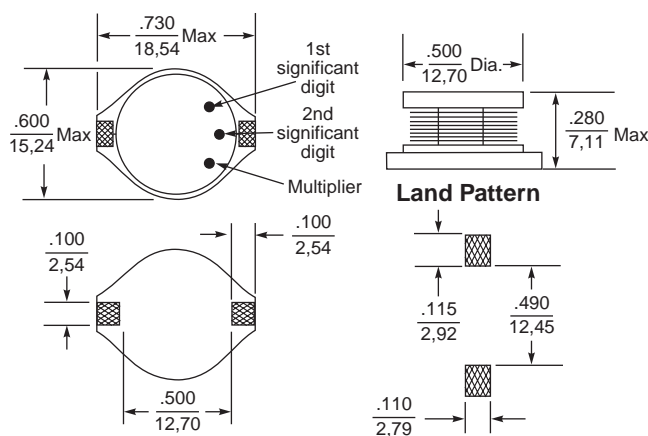
A 1  $\mu\text{H}$  inductor is rated at 8.6 Arms with a saturation current of 20 Amps. Exceptionally low dc resistance (as low as .009 $\Omega$ ) keeps power losses to a minimum.

The DO5022 Series was designed specifically for surface mounting. It has a flat top for reliable pick and place operations and features robust temperature deflection.

In addition to the standard versions shown here, custom inductors are available to meet your exact requirements.

Coilcraft **Designer's Kit C111** contains 3 samples each of the standard parts shown. To order, contact Coilcraft.

## PSPICE models SEE DOC 209



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

Part Number	Inductance <sup>1</sup> ( $\mu\text{H} \pm 20\%$ )	DCR max. ( $\Omega$ )	SRF Typ <sup>2</sup> (MHz)	Isat <sup>3</sup> (A)	Irms <sup>4</sup> (A)
DO5022P-102	1.0	.009	80	20	8.6
DO5022P-222	2.2	.014	80	16	7.1
DO5022P-332	3.3	.018	60	14	6.2
DO5022P-562	5.6	.020	40	12	5.3
DO5022P-103	10	.031	30	10	4.3
DO5022P-153	15	.036	22	8.0	4.0
DO5022P-223	22	.047	20	7.0	3.5
DO5022P-333	33	.066	15	5.5	3.0
DO5022P-473	47	.086	9	4.5	2.6
DO5022P-683	68	.13	8	3.5	2.3
DO5022P-104	100	.19	7	3.0	1.8
DO5022P-154	150	.25	6	2.6	1.5
DO5022P-224	220	.38	5	2.4	1.2
DO5022P-334	330	.56	4	1.9	1.0
DO5022P-474	470	.85	3	1.4	0.82
DO5022P-684	680	1.1	2.5	1.2	0.72
DO5022P-105	1000	1.8	2	1.0	0.56

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

- Inductance tested at 100 kHz, .1 Vrms.
- SRF >13 MHz measured using HP8753D network analyzer;  
<13 MHz using HP4192A.
- Inductance drop = 10% typ. at Isat.
- $\Delta T = 40^\circ\text{C}$  typ at I rms.
- Operating temperature range  $-40^\circ\text{C}$  to  $+85^\circ\text{C}$ .

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Specifications subject to change without notice. Document 172 Revised 5/19/99

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