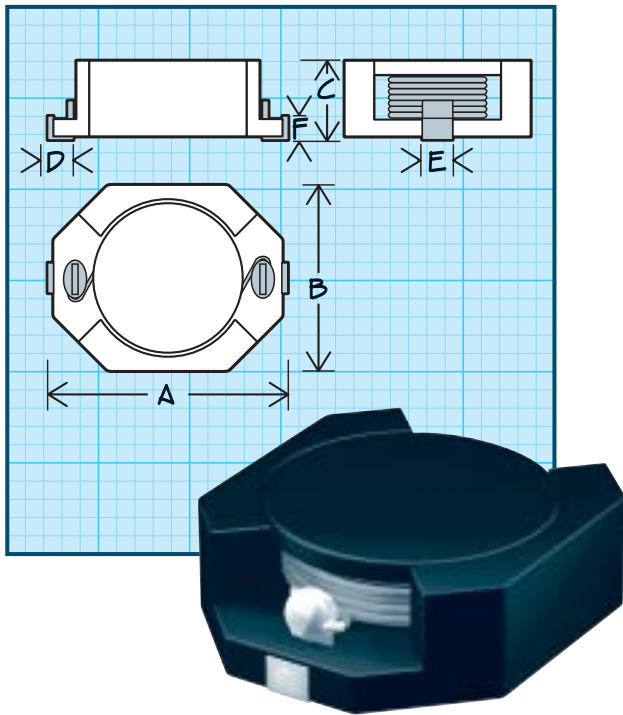


Series 5142 High Current Surface Mount Power Inductors

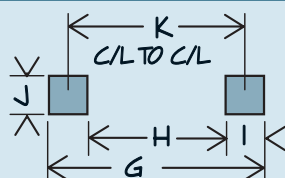


Mechanical Configuration A high saturation ferrite bobbin core allows for excellent size to Direct Current handling ratio. The base is a molded thermoset epoxy material with side wall extensions that provide protection to the ferrite core.

Physical Parameters

	Inches	Millimeters
A	0.530 ± 0.015	13.46 ± 0.38
B	0.420 ± 0.010	10.67 ± 0.25
C	0.175 ± 0.010	4.45 ± 0.25
D	0.060 ± 0.010	1.52 ± 0.25
E	0.070 ± 0.010	1.78 ± 0.25
F	0.035 Min.	0.889 Min.
G	0.560	14.22
H	0.360	9.14
K	0.100	2.54
L	0.100	2.54
M	0.460	11.68

LAND PATTERN DIMENSIONS



PART NUMBER
INDUCTANCE @ 100kHz
(μH) ± 10%
DC RESISTANCE
MAXIMUM (OHMS)
INCREMENTAL
CURRENT (mA)
CURRENT RATING
MAXIMUM (mA)
SRF TYPICAL (MHz)

SERIES 5142 FERRITE CORE

5142-103K	10	0.070	3400	2000	30
5142-123K	12	0.075	3200	1930	28
5142-153K	15	0.095	2800	1710	23
5142-183K	18	0.110	2500	1595	21
5142-223K	22	0.130	2240	1465	19
5142-273K	27	0.150	2040	1365	18
5142-333K	33	0.170	1880	1280	16
5142-393K	39	0.180	1680	1245	14
5142-473K	47	0.190	1500	1210	13
5142-563K	56	0.200	1400	1180	12
5142-683K	68	0.280	1260	1000	11
5142-823K	82	0.330	1160	920	10
5142-104K	100	0.360	1040	880	9.0
5142-124K	120	0.430	960	800	8.0
5142-154K	150	0.500	860	740	7.3
5142-184K	180	0.660	780	650	6.5
5142-224K	220	0.800	720	590	5.9
5142-274K	270	0.870	640	565	5.2
5142-334K	330	1.15	580	490	4.6
5142-394K	390	1.40	540	445	4.0
5142-474K	470	1.55	480	425	3.6
5142-564K	560	1.90	440	380	3.3
5142-684K	680	2.20	400	355	2.9
5142-824K	820	2.90	360	310	2.6
5142-105K	1000	3.60	330	275	2.3
5142-125K	1200	4.40	300	250	2.1
5142-155K	1500	6.00	270	215	1.9
5142-185K	1800	6.50	250	205	1.7
5142-225K	2200	7.80	230	190	1.5
5142-275K	2700	8.70	200	175	1.3
5142-335K	3300	11.7	180	155	1.2
5142-395K	3900	15.5	170	130	1.1
5142-475K	4700	17.5	150	125	1.0
5142-565K	5600	20.0	140	115	0.9
5142-685K	6800	26.0	130	100	0.8
5142-825K	8200	30.0	110	95	0.7
5142-106K	10000	38.0	100	85	0.6

Operating Temperature Range -55°C to +125°C

Current Rating at 85°C Ambient 40°C rise

Maximum Power Dissipation at 85°C 0.388 Watts

Incremental Current The current at which the inductance will be decreased by a maximum of 10% from the initial zero DC value.

DWV Rating 200Vrms between terminals and top & sides

Termination 90/10 plating

Weight 1.4 grams max.

Packaging Tape & Reel (24mm): 13" reel, 500 pieces max.; 7" reel not available