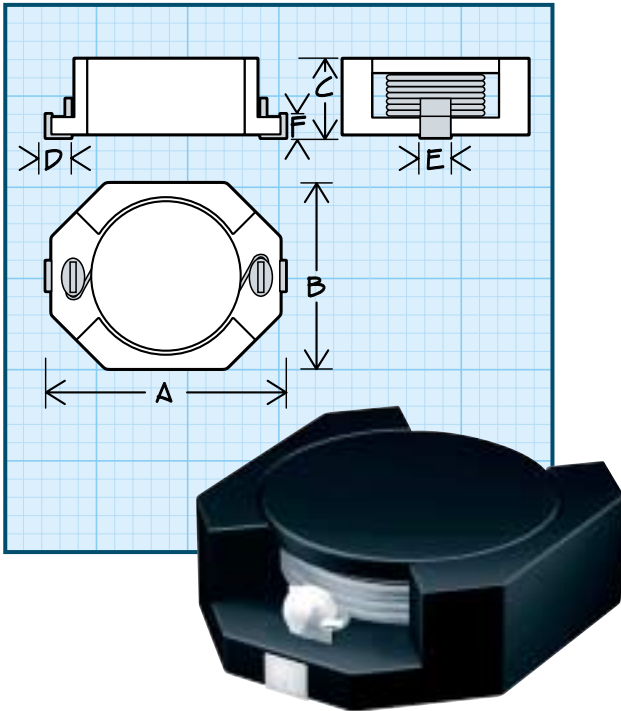


High Current  
Surface Mount Power Inductors

POWER INDUCTORS

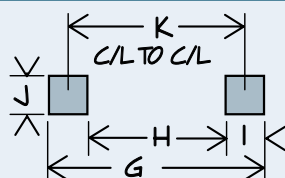


**Mechanical Configuration** A high saturation ferrite bobbin core allows for excellent size to Direct Current handling ratio. The base is a molded thermoset epoxy material with side wall extensions that provide protection to the ferrite core.

**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         |
| I | 0.100         | 2.54         |
| J | 0.100         | 2.54         |
| K | 0.460         | 11.68        |

**LAND PATTERN DIMENSIONS**



DASH NUMBER\*

INDUCTANCE @ 100kHz  
(µH) ± 10%

DC RESISTANCE  
MAXIMUM (OHMS)

INCREMENTAL  
CURRENT (mA)

CURRENT RATING  
MAXIMUM (mA)

SRF TYPICAL (MHz)

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

\*Complete part # must include series # PLUS the dash #

For further surface finish information,  
refer to TECHNICAL section of this catalog.

**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

**Weight** 1.4 grams max.

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