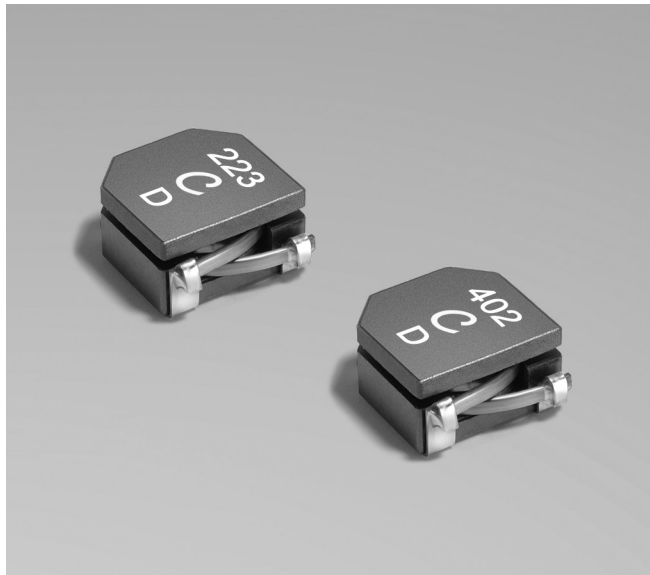


Shielded Power Inductors SRT8045



The SRT8045 Series is not available for new designs. As an alternative, we recommend the XAL7050 Series which features soft saturation characteristics, inductance values up to 47 μH , and a smaller footprint. For lower inductance values (0.16 μH to 10 μH), higher current ratings, and a smaller package size, see our XAL7030 Series.

Core material Ferrite

Weight 1.0 – 1.15 g

Environmental RoHS compliant, halogen free

Terminations RoHS compliant matte tin over nickel over phos bronze

Ambient temperature -40°C to $+125^{\circ}\text{C}$

Maximum part temperature $+165^{\circ}\text{C}$ (ambient + temp rise).

Storage temperature Component: -40°C to $+165^{\circ}\text{C}$.

Tape and reel packaging: -40°C to $+80^{\circ}\text{C}$

Resistance to soldering heat Max three 40 second reflows at $+260^{\circ}\text{C}$, parts cooled to room temperature between cycles

Moisture Sensitivity Level (MSL) 1 (unlimited floor life at $<30^{\circ}\text{C}$ / 85% relative humidity)

Failures in Time (FIT) / Mean Time Between Failures (MTBF)

38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332

PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787_PCB_Washing.pdf](#).

Part number ¹	Inductance ² (μH) $\pm 20\%$	DCR (mOhms) ³		SRF typ ⁴ MHz	Isat (A) ⁵			Irms (A) ⁶	
		typ	max		10% drop	20% drop	30% drop	20°C rise	40°C rise
SRT8045-142ME_	1.4	7.70	9.50	69.0	15.8	16.8	17.4	8.0	12.0
SRT8045-402ME_	4.0	11.6	14.5	34.5	8.70	9.80	10.4	6.8	9.9
SRT8045-103ME_	10	32.5	37.0	22.0	5.70	6.40	7.00	4.2	6.0
SRT8045-153ME_	15	45.7	48.8	16.4	4.20	5.00	5.50	4.0	5.8
SRT8045-223ME_	22	64.0	68.0	13.1	3.40	3.90	4.50	2.8	3.8

1. When ordering, please specify **packaging** codes:

SRT8045-223MED

Packaging: **C** = 7" machine-ready reel. EIA-481 embossed plastic tape (300 parts per full reel).

B = Less than full reel. In tape, but not machine ready. To have a leader and trailer added (\$25 charge), use code letter C instead.

D = 13" machine-ready reel. EIA-481 embossed plastic tape. Factory order only, not stocked (1200 parts per full reel).

2. Inductance tested at 100 kHz, 0.1 Vrms, 0 Adc.

3. DCR measured on a micro-ohmmeter.

4. SRF measured using Agilent/HP 4395A or equivalent.

5. DC current at 25°C that causes the specified inductance drop from its value without current.

6. Current that causes the specified temperature rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings.

7. Electrical specifications at 25°C .

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



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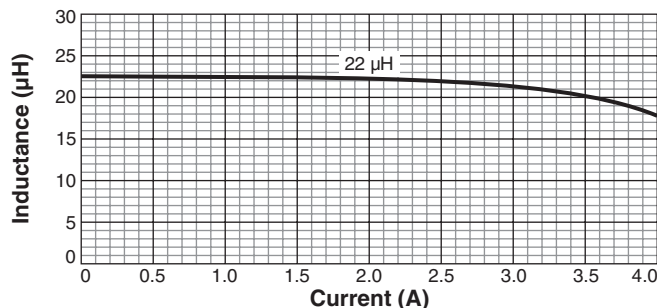
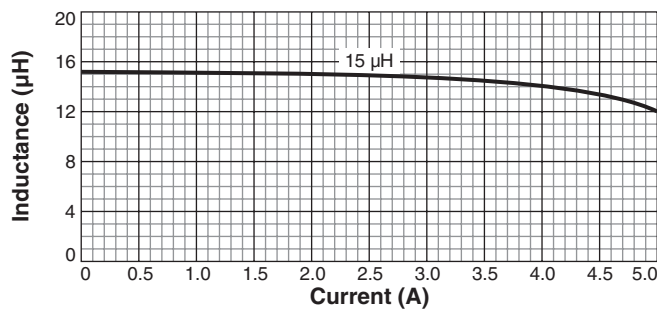
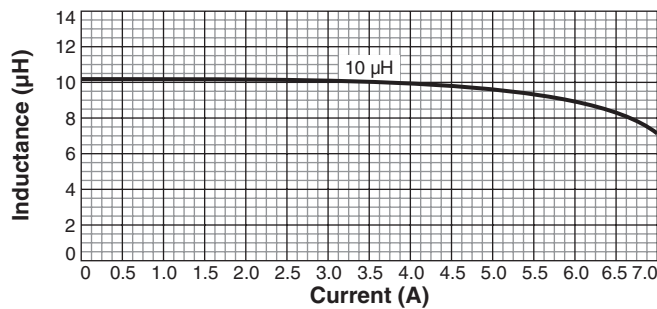
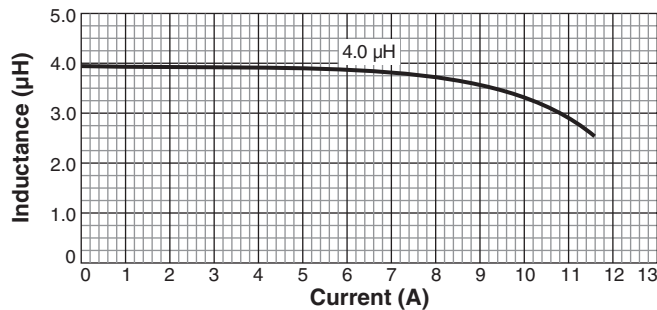
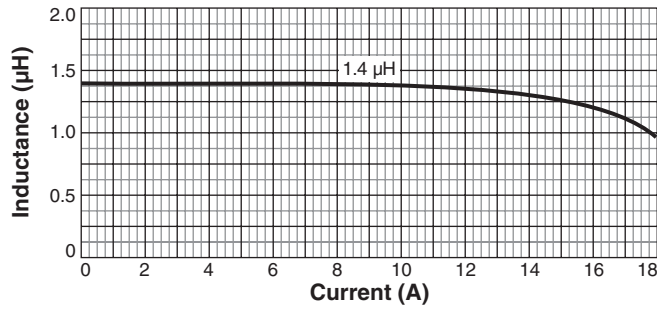
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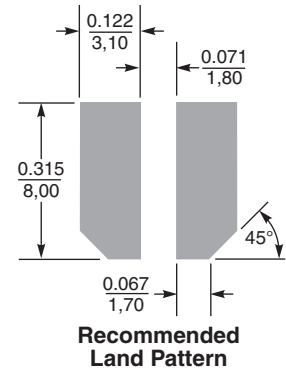
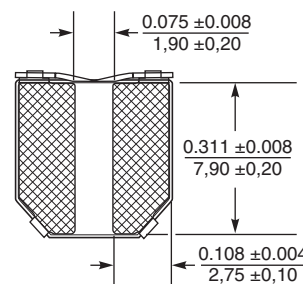
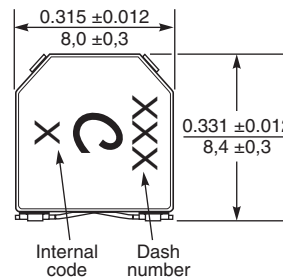
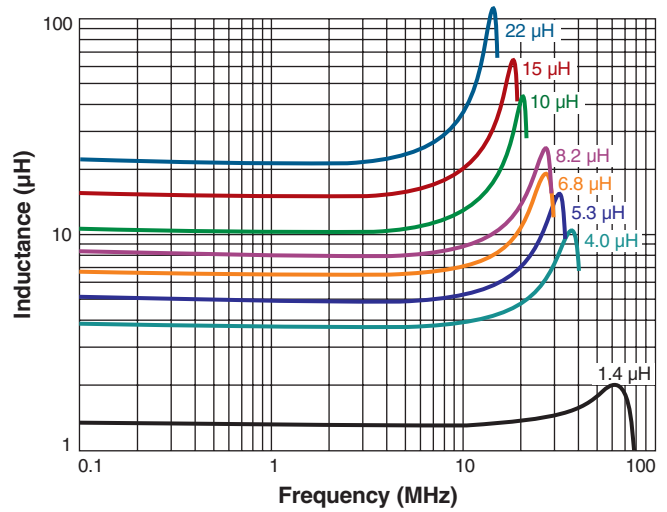


Power Inductors – SRT8045 Series

L versus Current



L versus Frequency



Dimensions are in $\frac{\text{inches}}{\text{mm}}$

Packaging 300/7" reel; 1200/13" reel Plastic tape: 16 mm wide, 0.4 mm thick, 12 mm pocket spacing, 4.57 mm pocket depth



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