

#### **Features**

- E6 series optional
- Unit height of 5.5 mm
- Current rating up to 5 A
- J-hook leads
- RoHS compliant\*

#### **Applications**

- Input/output of DC/DC converters
- Power supplies for:
  - · Portable communication equipment
  - · Camcorders
  - LCD TVs

## **SRR1205 Series - Shielded High Power Inductors**

#### **Electrical Characteristics**

		tance 1		Test Frequency	SRF Min.	RDC Max.	I rms Max.	l sat Typ.	
		Hz	Q						**K-
Bourns Part No.	(µH)	Tol. %	Ref.	(MHz)	(MHz)	(mΩ)	(A)	(A)	Factor
SRR1205-2R5ML	2.5	± 20	18	7.96M	27.0	24	5.00	10.00	75
SRR1205-3R3ML	3.3	± 20	20	7.96M	25.0	30	4.50	9.20	65
SRR1205-5R0ML	5.0	± 20	20	7.96M	21.0	35	4.00	8.20	58
SRR1205-7R5ML	7.5	± 20	20	7.96M	17.0	40	3.50	7.80	47
SRR1205-100ML	10	± 20	21	2.52M	15.0	54	3.00	6.00	39
SRR1205-120ML	12	± 20	20	2.52M	13.0	65	2.80	5.60	36
SRR1205-150ML	15	± 20	20	2.52M	11.0	70	2.70	5.30	34
SRR1205-180ML	18	± 20	20	2.52M	10.0	82	2.60	4.80	30
SRR1205-220ML	22	± 20	19	2.52M	9.0	95	2.40	4.60	26
SRR1205-270ML	27	± 20	18	2.52M	8.0	120	2.00	4.00	23
SRR1205-330ML	33	± 20	18	2.52M	8.0	145	1.80	3.50	22
SRR1205-390ML	39	± 20	18	2.52M	7.5	160	1.65	3.20	20
SRR1205-500YL	50	± 15	18	2.52M	7.0	200	1.50	2.80	17
SRR1205-560YL	56	± 15	18	2.52M	7.0	240	1.40	2.50	17
SRR1205-680YL	68	± 15	17	2.52M	6.5	280	1.30	2.40	15
SRR1205-750YL	75	± 15	17	2.52M	6.0	330	1.20	2.20	14
SRR1205-101KL	100	± 10	12	0.796M	5.0	400	1.00	2.00	12
SRR1205-121KL	120	± 10	10	0.796M	4.5	500	0.90	1.60	11
SRR1205-151KL	150	± 10	10	0.796M	4.0	580	0.80	1.50	10
SRR1205-181KL	180	± 10	9	0.796M	3.5	750	0.70	1.40	9
SRR1205-221KL	220	± 10	9	0.796M	3.0	840	0.65	1.30	8
SRR1205-271KL	270	± 10	9	0.796M	2.5	1000	0.60	1.00	7
SRR1205-331KL	330	± 10	7	0.796M	2.0	1340	0.54	0.88	7
SRR1205-391KL	390	± 10	7	0.796M	2.0	1500	0.50	0.80	6
SRR1205-471KL	470	± 10	7	0.796M	2.0	1980	0.45	0.72	6
SRR1205-561KL	560	± 10	6	0.796M	1.5	2200	0.40	0.65	5
SRR1205-681KL	680	± 10	6	0.796M	1.5	2400	0.35	0.60	5
SRR1205-821KL	820	± 10	5	0.796M	1.0	3000	0.30	0.57	4

<sup>\*\*</sup>K-Factor: To calculate core flux density, Bp-p (gauss) = K x L(μH) x Δ I (peak-to-peak ripple current, A), determine core loss from *Core Loss vs. Flux Density* plot.

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**Schematic** 

WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

\*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011. Specifications are subject to change without notice. Users should verify actual device performance in their specific applications. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at <a href="https://www.bourns.com/docs/legal/disclaimer.pdf">www.bourns.com/docs/legal/disclaimer.pdf</a>

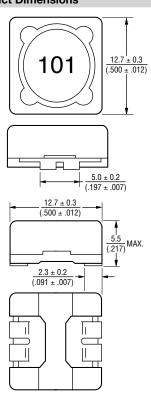
#### **General Specifications**

Test Voltage1 V					
Operating Temperature					
40 °C to +125 °C					
(Temperature rise included)					
Storage Temperature					
40 °C to +125 °C					
Resistance to Soldering Heat					
260 °C for 5 sec.					
Rated Current					
Ind. drop of 10 % typ. at Isat					
Temperature Rise					
40 °C max. at rated Irms					

#### Materials

Core	Ferrite DR & RI core
Wire	Enameled copper
Base	LCP E4008
Terminal	Cu/Ni/Sn
Packaging	600 pcs. per reel

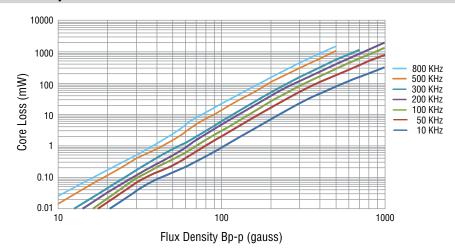
#### **Product Dimensions**



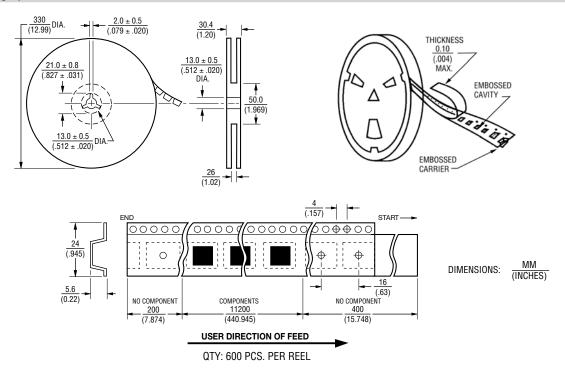
DIMENSIONS:

(INCHES)

#### Core Loss vs. Flux Density



#### **Packaging Specifications**



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SRR1205-270ML SRR1205-121KL SRR1205-470ML SRR1205-390ML SRR1205-2R5ML SRR1205-331KL

SRR1205-271KL SRR1205-120ML SRR1205-750YL SRR1205-330ML SRR1205-250ML SRR1205-101KL

SRR1205-560YL SRR1205-471KL SRR1205-391KL SRR1205-221KL SRR1205-500Y SRR1205-560Y SRR1205-561K SRR1205-271K SRR1205-680Y SRR1205-2R5M SRR1205-7R5M SRR1205-121K SRR1205-331K

SRR1205-151K SRR1205-391K SRR1205-220M SRR1205-470M SRR1205-221K SRR1205-471K SRR1205-150ML SRR1205-681KL SRR1205-500YL SRR1205-680YL SRR1205-151KL SRR1205-3R3ML SRR1205-180ML SRR1205-5R0ML SRR1205-100ML SRR1205-7R5ML SRR1205-821KL SRR1205-561KL SRR1205-561KL SRR1205-100ML SRR1205-100ML SRR1205-100ML SRR1205-100ML SRR1205-100ML SRR1205-100ML SRR1205-100M SRR1205-100M SRR1205-390M SRR1205-821K SRR1205-180M SRR1205-180M SRR1205-380M SRR1205-250M SRR120