

Chip Inductors for Critical Applications ST235RAM

- Higher inductance values than other 0402 inductors
- Ferrite construction for high current handling
- 23 inductance values from 20 nH to 560 nH

Core material Ferrite

Terminations RoHS compliant gold over nickel over silver-palladium-glass frit. Other terminations available at additional cost.

Ambient temperature -40°C to +85°C with I_{max} current

Maximum part temperature +100°C (ambient + temp rise)

Storage temperature Component: -55°C to +100°C.

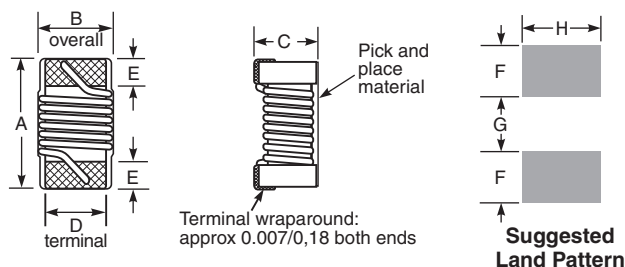
Packaging: -55°C to +80°C

Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

Temperature Coefficient of Inductance (TCL) +25 to +155 ppm/°C

Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)

Packaging 2000 per 7" reel. Paper tape: 8 mm wide, 0.68 mm thick, 2 mm pocket spacing



Terminal wraparound:
approx 0.007/0,18 both ends

**Suggested
Land Pattern**

A _{max}	B _{max}	C _{max}	D	E	F	G	H	
0.044	0.026	0.026	0.020	0.009	0.017	0.018	0.026	inches
1,12	0,66	0,66	0,51	0,23	0,43	0,46	0,66	mm

Note: Dimensions are before optional solder application. For maximum overall dimensions including solder, add 0.0025 in / 0,064 mm to B and 0.006 in / 0,15 mm to A and C.

Part number ¹	Inductance ² ±5% (nH)	SRF min ³ (MHz)	DCR max ⁴ (Ohms)	I _{max} (mA)
ST235RAM200JAZ	20	2600	0.050	600
ST235RAM220JAZ	22	2500	0.065	600
ST235RAM330JAZ	33	2300	0.060	600
ST235RAM360JAZ	36	2300	0.075	600
ST235RAM390JAZ	39	2200	0.135	490
ST235RAM510JAZ	51	1930	0.070	600
ST235RAM560JAZ	56	1900	0.105	600
ST235RAM720JAZ	72	1650	0.100	600
ST235RAM780JAZ	78	1600	0.130	580
ST235RAM101JAZ	100	1400	0.160	490
ST235RAM141JAZ	140	1220	0.260	350
ST235RAM181JAZ	180	1150	0.280	340
ST235RAM201JAZ	200	1000	0.550	220
ST235RAM221JAZ	220	1150	0.600	210
ST235RAM251JAZ	250	900	0.360	310
ST235RAM271JAZ	270	860	0.650	200
ST235RAM301JAZ	300	860	0.475	250
ST235RAM331JAZ	330	820	0.725	200
ST235RAM361JAZ	360	810	0.625	200
ST235RAM391JAZ	390	760	0.950	170
ST235RAM421JAZ	420	700	0.850	190
ST235RAM471JAZ	470	650	0.900	180
ST235RAM561JAZ	560	600	1.200	150

1. When ordering, please specify **termination** and **screening** codes:

ST235RAM561JAZ

Termination: A = RoHS compliant gold over nickel over silver-palladium-glass frit.

Special order:

C = Tin-lead (63/37) over silver-platinum-glass frit.

F = Tin-silver-copper (95.5/4/0.5) over silver-platinum-glass frit.

R = RoHS compliant matte tin over nickel over silver-platinum-glass frit.

P = Tin-lead (63/37) over tin over nickel over silver-platinum-glass frit.

Q = Tin-silver-copper (95.5/4/0.5) over tin over nickel over silver-platinum-glass frit.

Screening: Z = Unscreened

H = Coilcraft CP-SA-10001 Group A

• Screening performed to the document's latest revision.

• Lot qualification (Group B) available.

• Custom testing also available.

• Country of origin restrictions available; prefix options G or F.

2. Inductance measured at 7.9 MHz using a Coilcraft SMD-F test fixture and Coilcraft-provided correlation pieces with an Agilent/HP 4286 impedance analyzer.

3. SRF measured using Agilent/HP 8753D network analyzer and Coilcraft SMD-D test fixture.

4. DCR measured on Cambridge Technology micro-ohmmeter and a Coilcraft CCF858 test fixture.

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

COILCRAFT ACCURATE
PRECISION REPEATABLE
MEASUREMENTS
SEE WEB SITE **TEST FIXTURES**

Coilcraft CPS
CRITICAL PRODUCTS & SERVICES

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1102 Silver Lake Road
Cary, IL 60013
Phone 800-981-0363

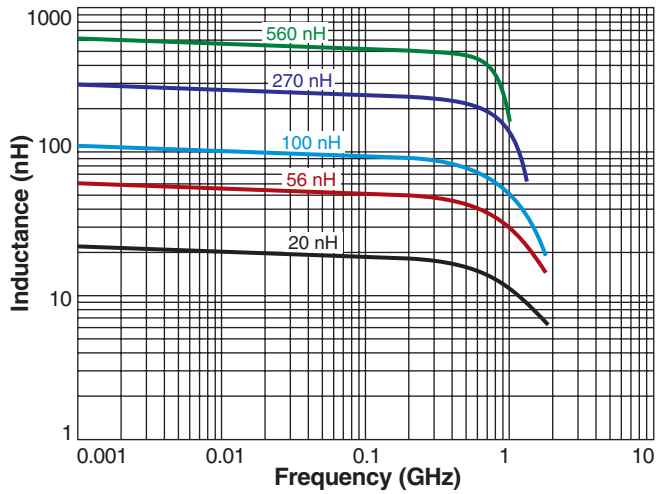
Fax 847-639-1508
Email cps@coilcraft.com
www.coilcraft-cps.com

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ST235RAM Series (0402)

Typical L vs Frequency



Typical Q vs Frequency

