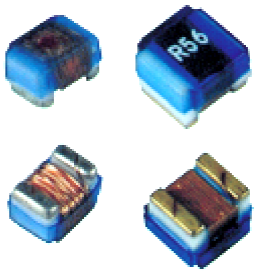
Chip Inductors CFM0805LS-Series

- CFM0805LS- Series

1.Dimensions(mm)

- Higher inductance values than other 0603 inductors
- Ferrite construction for high current handling
- Inductance values: 47 nH – 22 µH; 5% and 2% tolerance



Designer's Kit C347 contains 10 each of all 5% values

Core material Ceramic/Ferrite

Environmental RoHS compliant, halogen free

Terminations Silver-palladium-platinum-glass frit. Other terminations available at additional cost.

Weight 4.8 – 6.2 mg

Ambient temperature –40°C to +85°C with Irms current

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

Storage temperature Component: –40°C to +100°C. Tape and reel packaging: –40°C to +80°C

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

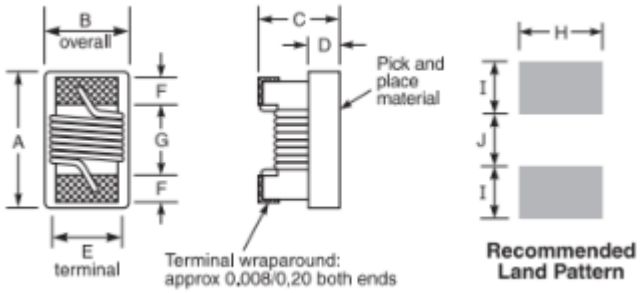
Temperature Coefficient of Inductance (TCL) +50 to +150 ppm/°C

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

Failures in Time (FIT) / Mean Time Between Failures (MTBF) One per billion hours / one billion hours, calculated per Telcordia SR-332

Packaging 2000 per 7" reel. Plastic tape: 8 mm wide, 0.23 mm thick, 4 mm pocket spacing, 1.17 mm pocket depth

PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787_PCB_Washing.pdf.



NO.	A (max)	B (max)	C (max)	D Typ.	E	F	G	H	I	J
Spec.	0.090	0.075	0.063	0.020	0.050	0.020	0.040	0.070	0.040	0.030
	2.29	1.19	1.60	0.51	1.27	0.51	1.02	1.78	1.02	0.76

Note: Height dimension (C) is before optional solder application. For maximum height dimension including solder, add 0.006 in / 0.152 mm.

2. Electrical characteristics

Part number1	Inductance2 (nH)	Percent tolerance	Q min3	SRF min (MHz)	DCR max5 (Ohms)	Irms6
CFM0805LS-78NX-E-	0.078@7.9MHz	5.2	19@7.9MHz	1440	0.042	2.0
CFM0805LS-111X-E-	0.110@7.9MHz	5.2	19@7.9MHz	1200	0.05	2.0
CFM0805LS-471X-E-	0.470@7.9MHz	5.2	19@7.9MHz	500	0.31	0.720
CFM0805LS-681X-E-	0.680@7.9MHz	5.2	20@7.9MHz	400	0.46	0.590
CFM0805LS-102X-E-	1.0@7.9MHz	5.2	20@7.9MHz	340	0.69	0.500
CFM0805LS-122X-E-	1.2@7.9MHz	5.2	15@7.9MHz	280	1.20	0.400
CFM0805LS-152X-E-	1.5@7.9MHz	5.2	20@7.9MHz	275	1.03	0.490
CFM0805LS-182X-E-	1.8@7.9MHz	5.2	20@7.9MHz	246	1.15	0.410
CFM0805LS-222X-E-	2.2@7.9MHz	5.2	20@7.9MHz	106	1.28	0.365

FangchengElectronics(Dongguan)Co.,LTD TEL：0769-82988010 FAX：0769-82988065
E-mail:yhl@fangchengcoils.com http://www.fangchengcoils.com

Part number1	Inductance2 (nH)	Percent tolerance	Q min3	SRF min (MHz)	DCR max5 (Ohms)	Irms6
CFM0805LS-272X-E-	2.7@7.9MHz	5.2	20@7.9MHz	105	1.48	0.350
CFM0805LS-332X-E-	3.3@7.9MHz	5.2	20@7.9MHz	83	1.57	0.330
CFM0805LS-392X-E-	3.9@7.9MHz	5.2	20@7.9MHz	52	1.70	0.300
CFM0805LS-472X-E-	4.7@7.9MHz	5.2	20@7.9MHz	50	1.87	0.280
CFM0805LS-682X-E-	6.8@7.9MHz	5.2	20@7.9MHz	35	2.25	0.260
CFM0805LS-822X-E-	8.2@7.9MHz	5.2	18@7.9MHz	27	2.55	0.250
CFM0805LS-103X-E-	10.0@7.9MHz	5.2	18@7.9MHz	21	3.45	0.200
CFM0805LS-153X-E-	15.0@7.9MHz	5.2	18@7.9MHz	17	5.03	0.180
CFM0805LS-223X-E-	22.0@7.9MHz	5.2	18@7.9MHz	13	6.18	0.150
CFM0805LS-273X-E-	27.0@7.9MHz	5.2	15@7.9MHz	11	11.04	0.120

1. When ordering, specify **tolerance, termination** and **packaging** codes:

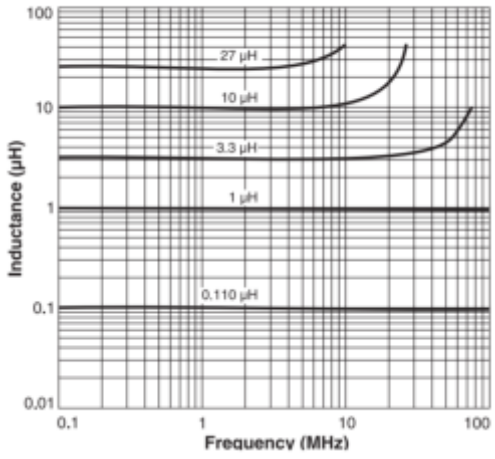
0603LS-822XJEC

Tolerance: G = 2% J = 5% (Table shows stock tolerances in bold.)
Termination: E = Halogen free component. RoHS compliant silver-palladium-platinum-glass frit terminations.
L = RoHS compliant, not halogen-free. Silver-palladium-platinum-glass frit terminations.
Special order: T = RoHS tin-silver-copper (95.5/4/0.5) or S = non-RoHS tin-lead (63/37).
Packaging: C = 7" machine-ready reel. EIA-481 embossed plastic tape (2000 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.

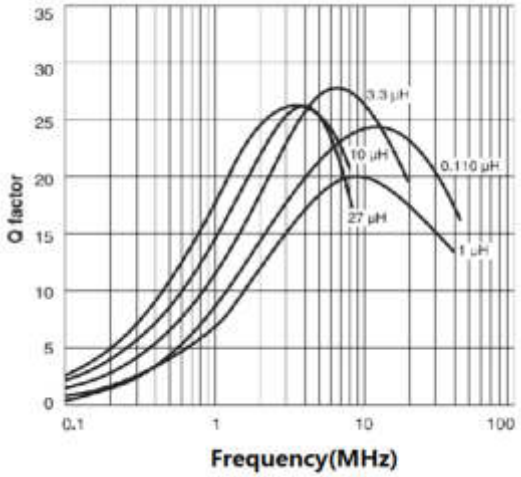
2. Inductance measured at 0.1 Vrms, using Coilcraft SMD-A fixture in Agilent/HP 4286A impedance analyzer with Coilcraft-provided correlation pieces.
3. Q measured on Agilent/HP 4395A with Agilent/HP 16193 test fixture.
4. SRF measured using Agilent/HP 8753D network analyzer with Coilcraft SMD-D test fixture.
5. DCR measured on Cambridge Technology Micro-ohmmeter.
6. Current that causes a 15°C temperature rise from 25°C ambient. Because of their open construction, these parts will not saturate. 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.

Typical L vs Frequency



Typical Q vs Frequency



FangchengElectronics(Dongguan)Co.,LTD
E-mail:yhl@fangchengcoils.com
TEL：0769-82988010 FAX：0769-82988065
http://www.fangchengcoils.com