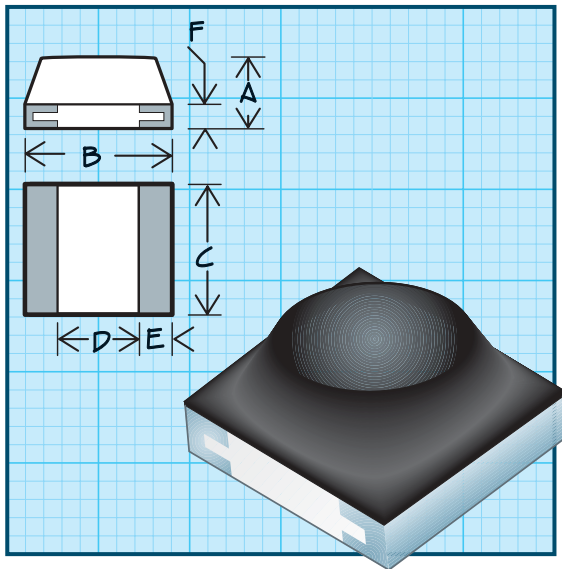


Series 3090

Micro i® Low Profile Chip Inductors



Physical Parameters

	Inches	Millimeters
A	0.050 Max.	1.27 Max.
B	0.100±0.010	2.54±.254
C	0.100±0.010	2.54±.254
D	0.050 Min.	1.27 Min.
E	0.015 Min. (Typ)	0.38 Min. (Typ)
F	0.020 Max. (Typ)	0.51 Max. (Typ)

Current Rating at 90°C Ambient 35°C Rise

Operating Temperature Range -55°C to +125°C

Maximum Power Dissipation at 90°C 0.105 W

Core Material Powdered iron core for improved temperature stability.

Mechanical Configuration Units are epoxy encapsulated. Contact area for reflow soldering are gold plated per MIL-G-45204 Type 1 Grade A. Internal connections are thermal compression bonded.

Termination Finish Options

Standard: Gold over Nickel.

For Tin/Lead over Nickel: Add suffix "S" to part number and allow an additional .010 inch for maximum height.

Packaging Tape & reel (8mm): 7" reel, 2000 pieces max.; 13" reel, 8000 pieces max.

MIL-PRF-83446 (Reference) for testing methods only.

Made in the U.S.A.

PART NUMBER

INDUCTANCE (μH)

TOLERANCE

Q MINIMUM

TEST FREQUENCY (MHz)

SRF MINIMUM (MHz)

DC RESISTANCE MAXIMUM (OHMS)

CURRENT RATING MAX. (mA)

SERIES 3090 IRON CORE

3090-100M	0.010	± 20%	42	50.0	1000	0.095	890
3090-150M	0.015	± 20%	42	50.0	1000	0.115	810
3090-220M	0.022	± 20%	40	50.0	1000	0.140	765
3090-330K	0.033	± 10%	40	50.0	900	0.185	640
3090-390K	0.039	± 10%	40	50.0	900	0.100	870
3090-470K	0.047	± 10%	38	50.0	900	0.110	830
3090-560K	0.056	± 10%	35	50.0	800	0.135	750
3090-680K	0.068	± 10%	30	50.0	700	0.16	690
3090-820K	0.082	± 10%	25	50.0	650	0.19	630
3090-101K	0.10	± 10%	32	25.0	510	0.08	970
3090-121K	0.12	± 10%	32	25.0	410	0.10	870
3090-151K	0.15	± 10%	32	25.0	370	0.12	795
3090-181K	0.18	± 10%	32	25.0	330	0.14	765
3090-221K	0.22	± 10%	34	25.0	300	0.16	690
3090-271K	0.27	± 10%	34	25.0	250	0.20	615
3090-331K	0.33	± 10%	34	25.0	220	0.25	550
3090-391K	0.39	± 10%	34	25.0	200	0.30	500
3090-471K	0.47	± 10%	34	25.0	180	0.36	460
3090-561K	0.56	± 10%	34	25.0	160	0.45	410
3090-681K	0.68	± 10%	30	25.0	140	0.50	390
3090-821K	0.82	± 10%	28	25.0	120	0.60	355
3090-102K	1.00	± 10%	24	25.0	100	0.70	330
3090-122K	1.20	± 10%	24	7.9	95	1.10	265
3090-152K	1.50	± 10%	24	7.9	90	1.20	250
3090-182K	1.80	± 10%	24	7.9	85	1.25	245
3090-222K	2.20	± 10%	25	7.9	80	1.30	240
3090-272K	2.70	± 10%	25	7.9	70	1.50	225
3090-332K	3.30	± 10%	25	7.9	65	1.90	200
3090-392K	3.90	± 10%	25	7.9	60	2.30	180
3090-472K	4.70	± 10%	24	7.9	55	3.00	160
3090-562K	5.60	± 10%	22	7.9	53	3.50	145
3090-682K	6.80	± 10%	22	7.9	50	4.00	135
3090-822K	8.20	± 10%	22	7.9	45	4.50	130
3090-103K	10.0	± 10%	20	7.9	40	5.00	120

Notes 1) Designed specifically for reflow soldering and other high temperature processes with metallized edges to exhibit solder fillet. 2) Self Resonant Frequency (SRF) values 250 MHz and above are calculated and for reference only.