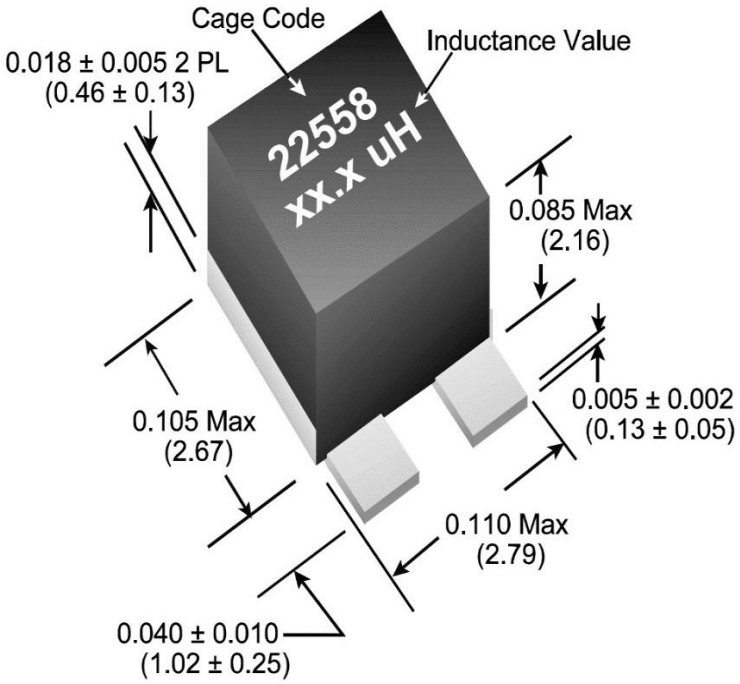
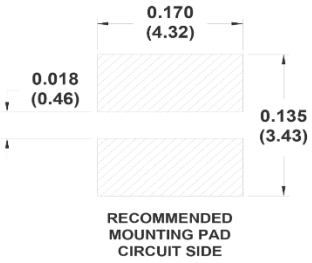
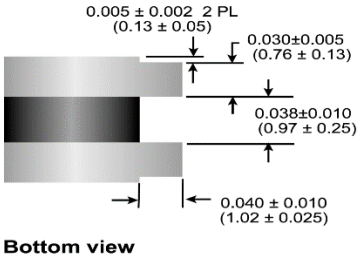
Fixed Chip Inductors – 5000 Series



Inches
(Millimeters)

MIL-PRF-83446
Qualified Products List (QPL)
QPL: M83446/05





SPECIFICATIONS

- **Inductance:** 0.010 µH to 10 µH
- **Standard Tolerance:** ±10%
- **Operating Temperature:** -55°C to +125°C
- **Storage Temperature:** -60°C to +130°C
- **Standard Termination Finish:** Tin-lead
- **Weight:** 0.5 gram, maximum
- **Dielectric Withstanding Voltage:** Method 301 of MIL-STD-202, test voltage 300 Vrms
- **Barometric Pressure:** Method 105, test condition C, MIL-STD-202 (70,000 feet), test voltage 200 Vrms
- **Glass Transition Temperature (T_g):** 165°C
- **Coefficient of Thermal Expansion (CTE):**
  Before T_g 18 ppm/°C
  After T_g 54 ppm/°C

FEATURES

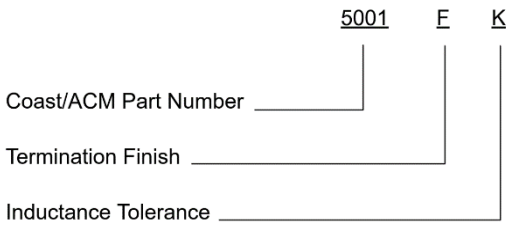
- Transfer Molded Package
- Laser Marking
- Leadless device for minimum footprint
- Internal Welded Terminations
- Low EMI Radiation
- Low Thermal Expansion permits mounting on most substrate materials
- Termination Finish Options available (additional charge)
- Tighter Tolerances available (additional charge)
- Tape and Reel Packaging Available (additional charge)
  Full Reel Quantity (Tabs): 1800 pieces
  Full Reel Quantity (No Tabs): 2000 pieces
- Custom Designs: Other electrical configurations and performance characteristics are available in various sizes and package type
- Available for Space Application per MIL-STD-981 (see S5000 Series)

APPLICATIONS

Designed to meet the requirements of MIL-PRF-83446, ensuring optimal performance in military-grade applications.

This specification pertains to molded, shielded electrical connectors and accessories, emphasizing reliability and robustness. Ideal for aerospace and defense applications, these inductors offer both durability and precision

PART IDENTIFYING NUMBER



F: Termination Finish
A: Gold *F: Tin-lead*

K: Inductance Tolerance
M: ±20% *K: ±10%* *J: ±5%* *H: ±3%* *G: ±2%* *F: ±1%*

Fixed Chip Inductors – 5000 Series

With Tabs		Without Tabs		Inductance (µH)	Test Frequency (MHz)	Q (min)	Q Typ	SRF (min) MHz	DCR (max) ohms	Current (max) mA
Dash Number	C/ACM P/N	Dash Number	C/ACM P/N							
M83446/05-01	5001	M83446/05-38	5038	0.010 ±10%	150	50	55	2000	.025	750
M83446/05-02	5002	M83446/05-39	5039	0.012 ±10%	150	50	55	2000	.025	750
M83446/05-03	5003	M83446/05-40	5040	0.015 ±10%	150	50	55	1800	.040	750
M83446/05-04	5004	M83446/05-41	5041	0.018 ±10%	150	50	55	1500	.040	750
M83446/05-05	5005	M83446/05-42	5042	0.022 ±10%	100	45	50	1400	.040	750
M83446/05-06	5006	M83446/05-43	5043	0.027 ±10%	100	45	50	1200	.040	750
M83446/05-07	5007	M83446/05-44	5044	0.033 ±10%	100	47	55	1200	.050	640
M83446/05-08	5008	M83446/05-45	5045	0.039 ±10%	100	47	55	1200	.070	600
M83446/05-09	5009	M83446/05-46	5046	0.047 ±10%	100	47	55	1000	.080	550
M83446/05-10	5010	M83446/05-47	5047	0.056 ±10%	100	47	55	900	.090	520
M83446/05-11	5011	M83446/05-48	5048	0.068 ±10%	100	47	55	900	.10	480
M83446/05-12	5012	M83446/05-49	5049	0.082 ±10%	100	47	55	750	.11	470
M83446/05-13	5013	M83446/05-50	5050	0.100 ±10%	50	47	55	700	.11	470
M83446/05-14	5014	M83446/05-51	5051	0.120 ±10%	50	47	55	600	.11	470
M83446/05-15	5015	M83446/05-52	5052	0.150 ±10%	50	47	55	500	.12	450
M83446/05-16	5016	M83446/05-53	5053	0.180 ±10%	50	51	60	450	.14	430
M83446/05-17	5017	M83446/05-54	5054	0.220 ±10%	50	51	60	420	.20	350
M83446/05-18	5018	M83446/05-55	5055	0.270 ±10%	50	51	60	400	.25	310
M83446/05-19	5019	M83446/05-56	5056	0.330 ±10%	50	51	60	320	.30	280
M83446/05-20	5020	M83446/05-57	5057	0.390 ±10%	50	47	55	270	.45	240
M83446/05-21	5021	M83446/05-58	5058	0.470 ±10%	25	47	55	250	.50	230
M83446/05-22	5022	M83446/05-59	5059	0.560 ±10%	25	52	60	200	.55	220
M83446/05-23	5023	M83446/05-60	5060	0.680 ±10%	25	52	60	180	.58	210
M83446/05-24	5024	M83446/05-61	5061	0.820 ±10%	25	52	60	150	.60	200
M83446/05-25	5025	M83446/05-62	5062	1.00 ±10%	25	52	60	120	.65	190
M83446/05-26	5026	M83446/05-63	5063	1.20 ±10%	7.9	42	50	110	.75	180
M83446/05-27	5027	M83446/05-64	5064	1.50 ±10%	7.9	42	50	100	1.1	160
M83446/05-28	5028	M83446/05-65	5065	1.80 ±10%	7.9	48	55	95	1.2	150
M83446/05-29	5029	M83446/05-66	5066	2.20 ±10%	7.9	48	55	90	1.3	140
M83446/05-30	5030	M83446/05-67	5067	2.70 ±10%	7.9	48	55	65	1.5	130
M83446/05-31	5031	M83446/05-68	5068	3.30 ±10%	7.9	48	55	55	1.8	120
M83446/05-32	5032	M83446/05-69	5069	3.90 ±10%	7.9	48	55	45	2.0	110
M83446/05-33	5033	M83446/05-70	5070	4.70 ±10%	7.9	48	55	43	2.3	100
M83446/05-34	5034	M83446/05-71	5071	5.60 ±10%	7.9	48	55	40	2.5	100
M83446/05-35	5035	M83446/05-72	5072	6.80 ±10%	7.9	46	53	38	2.6	98
M83446/05-36	5036	M83446/05-73	5073	8.20 ±10%	7.9	46	53	35	2.8	95
M83446/05-37	5037	M83446/05-74	5074	10.0 ±10%	7.9	46	53	33	3.3	87