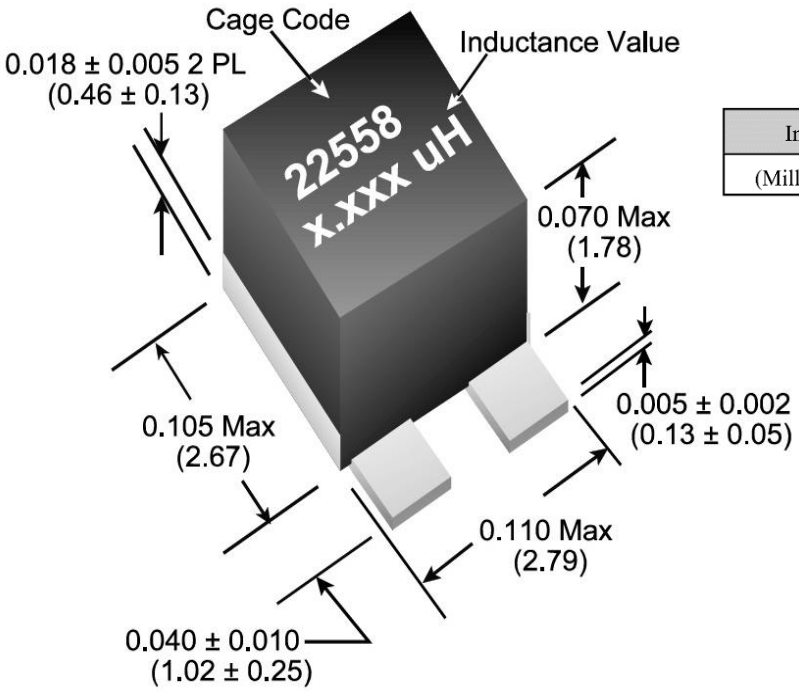
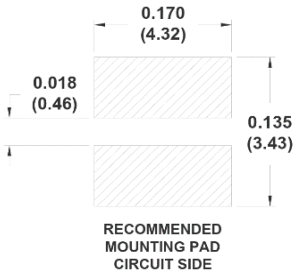
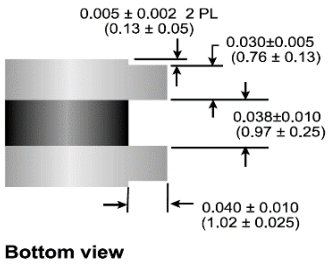
Fixed Chip Inductors – 8000 Series



Inches
(Millimeters)

MIL-PRF-83446
Qualified Products List (QPL)
QPL: M83446/08





SPECIFICATIONS

- **Inductance:** 0.010 µH to 100 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

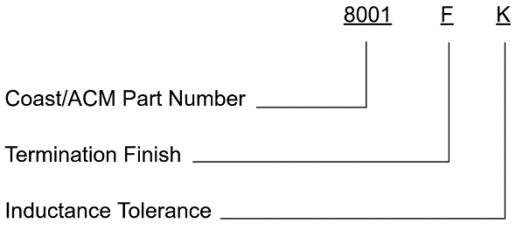
- Transfer Molded Package
- Laser Marking
- Leadless device for minimum footprint
- Internal Welded Terminations
- Low EMI Radiation
- Low Thermal Expansion permits mounting on most substrate materials
- Termination Finish Options available (additional charge)
- Tighter Tolerances available (additional 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 S8000 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 – 8000 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							
M83446/08-01	8001	M83446/08-50	8050	0.010 ±10%	150	50	55	2000	.025	750
M83446/08-02	8002	M83446/08-51	8051	0.012 ±10%	150	50	55	2000	.025	750
M83446/08-03	8003	M83446/08-52	8052	0.015 ±10%	150	50	55	1800	.040	750
M83446/08-04	8004	M83446/08-53	8053	0.018 ±10%	150	50	55	1500	.040	750
M83446/08-05	8005	M83446/08-54	8054	0.022 ±10%	100	45	50	1400	.040	750
M83446/08-06	8006	M83446/08-55	8055	0.027 ±10%	100	45	50	1200	.040	750
M83446/08-07	8007	M83446/08-56	8056	0.033 ±10%	100	47	55	1100	.050	640
M83446/08-08	8008	M83446/08-57	8057	0.039 ±10%	100	47	55	1000	.07	600
M83446/08-09	8009	M83446/08-58	8058	0.047 ±10%	100	47	55	900	.08	550
M83446/08-10	8010	M83446/08-59	8059	0.056 ±10%	100	47	55	850	.09	520
M83446/08-11	8011	M83446/08-60	8060	0.068 ±10%	100	47	55	840	.10	480
M83446/08-12	8012	M83446/08-61	8061	0.082 ±10%	100	47	55	750	.11	470
M83446/08-13	8013	M83446/08-62	8062	0.100 ±10%	50	47	55	580	.11	470
M83446/08-14	8014	M83446/08-63	8063	0.120 ±10%	50	47	55	240	.11	470
M83446/08-15	8015	M83446/08-64	8064	0.150 ±10%	50	47	55	230	.12	450
M83446/08-16	8016	M83446/08-65	8065	0.180 ±10%	50	51	60	230	.14	430
M83446/08-17	8017	M83446/08-66	8066	0.220 ±10%	50	51	60	230	.20	350
M83446/08-18	8018	M83446/08-67	8067	0.270 ±10%	50	51	60	230	.25	310
M83446/08-19	8019	M83446/08-68	8068	0.330 ±10%	50	51	60	200	.30	280
M83446/08-20	8020	M83446/08-69	8069	0.390 ±10%	50	47	55	190	.45	240
M83446/08-21	8021	M83446/08-70	8070	0.470 ±10%	25	47	55	180	.50	230
M83446/08-22	8022	M83446/08-71	8071	0.560 ±10%	25	45	53	170	.50	230
M83446/08-23	8023	M83446/08-72	8072	0.680 ±10%	25	45	53	160	.50	230
M83446/08-24	8024	M83446/08-73	8073	0.820 ±10%	25	45	53	150	.50	230
M83446/08-25	8025	M83446/08-74	8074	1.00 ±10%	25	45	53	130	.50	230
M83446/08-26	8026	M83446/08-75	8075	1.20 ±10%	7.9	36	43	120	.60	200
M83446/08-27	8027	M83446/08-76	8076	1.50 ±10%	7.9	36	43	100	1.1	160
M83446/08-28	8028	M83446/08-77	8077	1.80 ±10%	7.9	38	45	90	1.1	160
M83446/08-29	8029	M83446/08-78	8078	2.20 ±10%	7.9	38	45	85	1.5	130
M83446/08-30	8030	M83446/08-79	8079	2.70 ±10%	7.9	41	48	80	1.7	125
M83446/08-31	8031	M83446/08-80	8080	3.30 ±10%	7.9	42	50	75	1.8	120
M83446/08-32	8032	M83446/08-81	8081	3.90 ±10%	7.9	42	50	65	2.0	110
M83446/08-33	8033	M83446/08-82	8082	4.70 ±10%	7.9	41	48	55	2.3	100
M83446/08-34	8034	M83446/08-83	8083	5.60 ±10%	7.9	41	48	45	2.6	98
M83446/08-35	8035	M83446/08-84	8084	6.80 ±10%	7.9	36	43	40	2.8	94
M83446/08-36	8036	M83446/08-85	8085	8.20 ±10%	7.9	36	43	35	3.0	90
M83446/08-37	8037	M83446/08-86	8086	10.0 ±10%	7.9	36	43	33	3.3	87
M83446/08-38	8038	M83446/08-87	8087	12.0 ±10%	7.9	36	43	26	4.0	79
M83446/08-39	8039	M83446/08-88	8088	15.0 ±10%	2.5	32	38	24	4.2	79
M83446/08-40	8040	M83446/08-89	8089	18.0 ±10%	2.5	32	38	21	4.4	75
M83446/08-41	8041	M83446/08-90	8090	22.0 ±10%	2.5	32	38	19	7.5	57
M83446/08-42	8042	M83446/08-91	8091	27.0 ±10%	2.5	32	38	14	8.0	55
M83446/08-43	8043	M83446/08-92	8092	33.0 ±10%	2.5	30	35	12	13.0	45
M83446/08-44	8044	M83446/08-93	8093	39.0 ±10%	2.5	30	35	10	17.0	38
M83446/08-45	8045	M83446/08-94	8094	47.0 ±10%	2.5	30	35	9.0	19.0	36
M83446/08-46	8046	M83446/08-95	8095	56.0 ±10%	2.5	30	35	8.5	23.0	33
M83446/08-47	8047	M83446/08-96	8096	68.0 ±10%	2.5	30	35	8.2	25.0	32
M83446/08-48	8048	M83446/08-97	8097	82.0 ±10%	2.5	30	35	8.0	28.0	30
M83446/08-49	8049	M83446/08-98	8098	100.0 ±10%	2.5	30	35	7.0	31.0	28