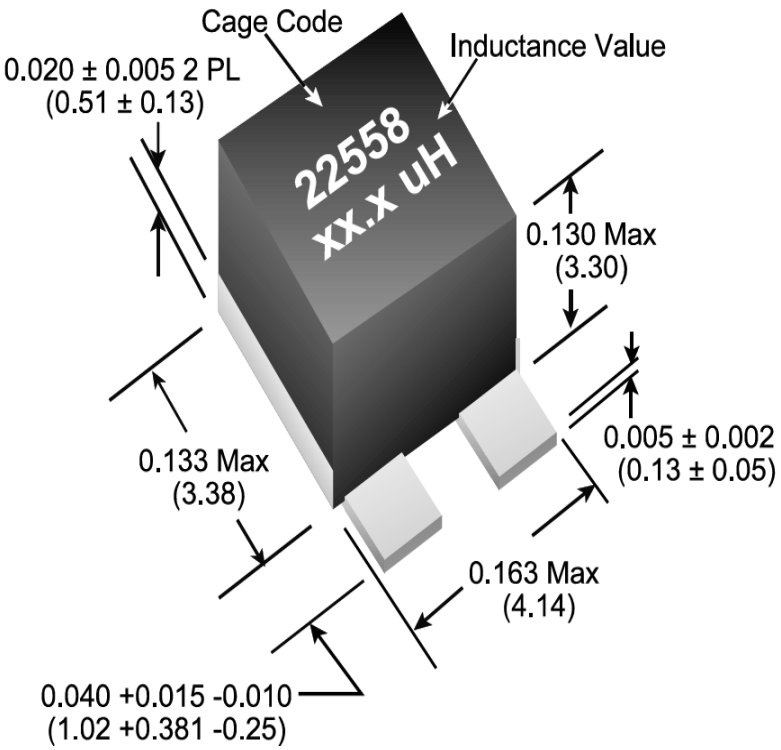
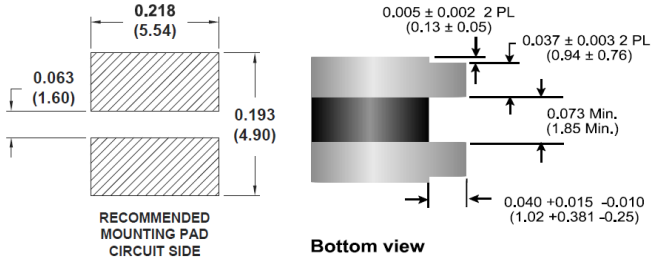
Fixed Chip Inductors – 10000 Series



Inches
(Millimeters)

MIL-PRF-83446
Qualified Products List (QPL)
QPL: M83446/10



SPECIFICATIONS

- **Inductance:** 0.010 µH to 1000 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 500 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

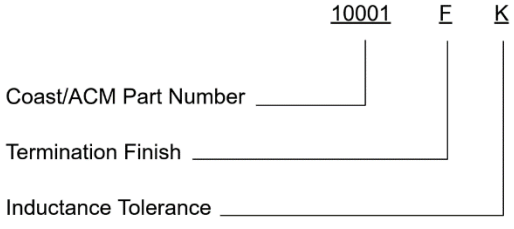
- Transfer Molded Package
- Laser Marking
- Leadless device for minimum footprint
- Internal Welded Terminations
- Low EMI Radiation
- Low Thermal Expansion permits mounting on most substrate materials
- Termination Finish Options available (additional charge)
- Tighter Tolerances available (additional charge)
- Tape and Reel Packaging Available (additional charge)
  Full Reel Quantity (Tabs): 600 pieces
  Full Reel Quantity (No Tabs): 650 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 S10000 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%*

COAST ACM

Fixed Chip Inductors – 10000 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							
M83446/10-01	10001	M83446/10-62	10062	0.010 ±10%	150	60	65	2000	.04	1000
M83446/10-02	10002	M83446/10-63	10063	0.012 ±10%	150	70	82	1800	.04	1000
M83446/10-03	10003	M83446/10-64	10064	0.015 ±10%	150	75	87	1500	.04	1000
M83446/10-04	10004	M83446/10-65	10065	0.018 ±10%	150	75	87	1500	.04	1000
M83446/10-05	10005	M83446/10-66	10066	0.022 ±10%	100	60	65	1300	.05	1000
M83446/10-06	10006	M83446/10-67	10067	0.027 ±10%	100	60	70	1300	.05	1000
M83446/10-07	10007	M83446/10-68	10068	0.033 ±10%	100	60	70	1000	.05	1000
M83446/10-08	10008	M83446/10-69	10069	0.039 ±10%	100	60	70	1000	.06	900
M83446/10-09	10009	M83446/10-70	10070	0.047 ±10%	100	65	75	800	.06	900
M83446/10-10	10010	M83446/10-71	10071	0.056 ±10%	100	65	75	760	.06	900
M83446/10-11	10011	M83446/10-72	10072	0.068 ±10%	100	65	75	700	.07	840
M83446/10-12	10012	M83446/10-73	10073	0.082 ±10%	100	65	75	650	.07	840
M83446/10-13	10013	M83446/10-74	10074	0.100 ±10%	50	65	77	570	.07	840
M83446/10-14	10014	M83446/10-75	10075	0.120 ±10%	50	65	77	520	.07	840
M83446/10-15	10015	M83446/10-76	10076	0.150 ±10%	50	75	87	400	.08	790
M83446/10-16	10016	M83446/10-77	10077	0.180 ±10%	50	75	87	360	.08	790
M83446/10-17	10017	M83446/10-78	10078	0.220 ±10%	50	70	80	320	.08	790
M83446/10-18	10018	M83446/10-79	10079	0.270 ±10%	50	70	80	270	.10	700
M83446/10-19	10019	M83446/10-80	10080	0.330 ±10%	50	70	80	240	.10	700
M83446/10-20	10020	M83446/10-81	10081	0.390 ±10%	50	70	80	220	.10	700
M83446/10-21	10021	M83446/10-82	10082	0.470 ±10%	25	70	80	190	.14	590
M83446/10-22	10022	M83446/10-83	10083	0.560 ±10%	25	70	82	170	.19	510
M83446/10-23	10023	M83446/10-84	10084	0.680 ±10%	25	70	83	160	.26	430
M83446/10-24	10024	M83446/10-85	10085	0.820 ±10%	25	75	84	150	.30	400
M83446/10-25	10025	M83446/10-86	10086	1.00 ±10%	25	75	87	130	.34	380
M83446/10-26	10026	M83446/10-87	10087	1.20 ±10%	7.9	65	73	120	.45	330
M83446/10-27	10027	M83446/10-88	10088	1.50 ±10%	7.9	65	73	110	.57	290
M83446/10-28	10028	M83446/10-89	10089	1.80 ±10%	7.9	65	73	100	.72	260
M83446/10-29	10029	M83446/10-90	10090	2.20 ±10%	7.9	65	73	80	.9	230
M83446/10-30	10030	M83446/10-91	10091	2.70 ±10%	7.9	65	73	60	1.1	210
M83446/10-31	10031	M83446/10-92	10092	3.30 ±10%	7.9	60	70	50	1.2	200
M83446/10-32	10032	M83446/10-93	10093	3.90 ±10%	7.9	60	70	45	1.4	180
M83446/10-33	10033	M83446/10-94	10094	4.70 ±10%	7.9	60	70	42	1.6	170
M83446/10-34	10034	M83446/10-95	10095	5.60 ±10%	7.9	65	75	40	1.8	160
M83446/10-35	10035	M83446/10-96	10096	6.80 ±10%	7.9	65	75	37	2.4	140
M83446/10-36	10036	M83446/10-97	10097	8.20 ±10%	7.9	65	75	34	3.0	130
M83446/10-37	10037	M83446/10-98	10098	10.0 ±10%	7.9	65	75	29	3.5	120
M83446/10-38	10038	M83446/10-99	10099	12.0 ±10%	2.5	60	70	27	3.6	118
M83446/10-39	10039	M83446/10-100	10100	15.0 ±10%	2.5	60	70	22	3.7	115
M83446/10-40	10040	M83446/10-101	10101	18.0 ±10%	2.5	60	72	17	3.8	114
M83446/10-41	10041	M83446/10-102	10102	22.0 ±10%	2.5	60	72	16	3.9	113
M83446/10-42	10042	M83446/10-103	10103	27.0 ±10%	2.5	65	75	15	4.0	110
M83446/10-43	10043	M83446/10-104	10104	33.0 ±10%	2.5	65	75	14	5.0	100
M83446/10-44	10044	M83446/10-105	10105	39.0 ±10%	2.5	65	75	13	7.0	84
M83446/10-45	10045	M83446/10-106	10106	47.0 ±10%	2.5	70	78	12	8.0	79
M83446/10-46	10046	M83446/10-107	10107	56.0 ±10%	2.5	70	78	11	10.0	70
M83446/10-47	10047	M83446/10-108	10108	68.0 ±10%	2.5	65	75	10	11.0	67
M83446/10-48	10048	M83446/10-109	10109	82.0 ±10%	2.5	60	72	9	12.0	64
M83446/10-49	10049	M83446/10-110	10110	100.0 ±10%	2.5	60	70	8	13.0	62
M83446/10-50	10050	M83446/10-111	10111	120.0 ±10%	0.79	40	48	7	14.0	59
M83446/10-51	10051	M83446/10-112	10112	150.0 ±10%	0.79	40	48	6	16.0	56
M83446/10-52	10052	M83446/10-113	10113	180.0 ±10%	0.79	40	48	5	18.0	52
M83446/10-53	10053	M83446/10-114	10114	220.0 ±10%	0.79	40	48	4	24.0	45
M83446/10-54	10054	M83446/10-115	10115	270.0 ±10%	0.79	40	48	3.3	25.0	44
M83446/10-55	10055	M83446/10-116	10116	330.0 ±10%	0.79	40	48	3.1	29.0	41
M83446/10-56	10056	M83446/10-117	10117	390.0 ±10%	0.79	40	48	2.9	32.0	39
M83446/10-57	10057	M83446/10-118	10118	470.0 ±10%	0.79	35	45	2.4	35.0	37
M83446/10-58	10058	M83446/10-119	10119	560.0 ±10%	0.79	35	45	2.1	45.0	33
M83446/10-59	10059	M83446/10-120	10120	680.0 ±10%	0.79	35	40	1.9	55.0	30
M83446/10-60	10060	M83446/10-121	10121	820.0 ±10%	0.79	30	36	1.8	70.0	26
M83446/10-61	10061	M83446/10-122	10122	1000.0 ±10%	0.79	30	36	1.7	80.0	25