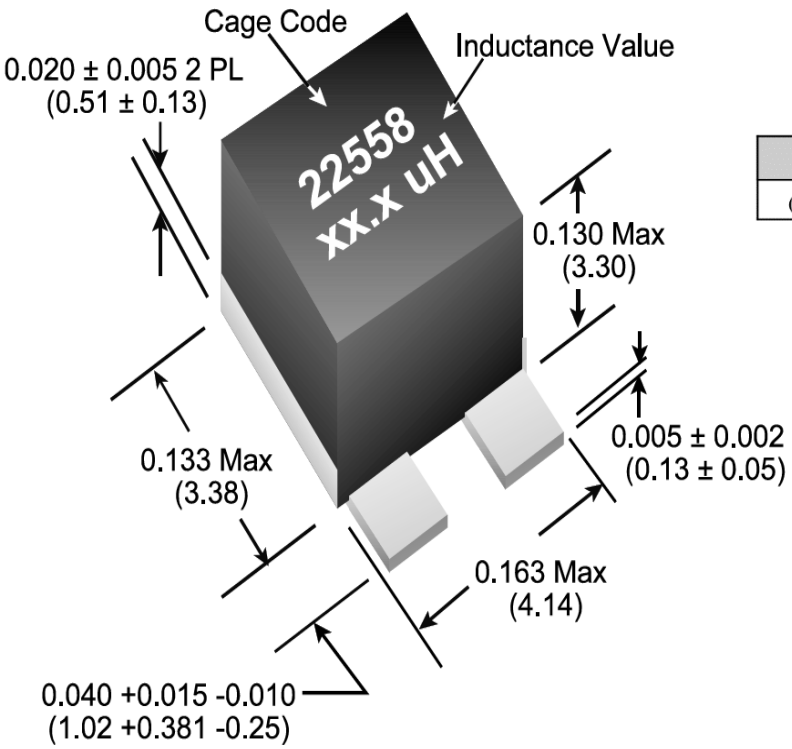
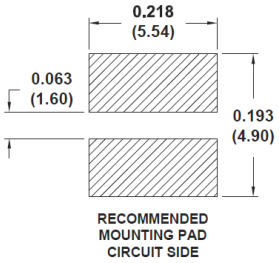
Fixed Chip Inductors – S10000 Series

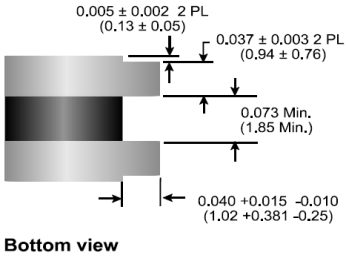


Inches
(Millimeters)

ISO 9001:2015 CERTIFIED · AS9100D CERTIFIED · ITAR REGISTERED

MIL-STD-981
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
- **Temperature rise (at 90°C):** 35°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
- Outgassing meets NASA spec SP-R-0022A: TML < 1%
- 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.

APPLICATIONS

These components meet the requirements of MIL-PRF-83446 and MIL-STD-981, Class S or Class B classifications:

- **Class S:** Specifically engineered for critical flight operations and essential ground support missions, as well as any application where safety is critical. These components undergo a stringent quality validation process, which includes both Group A and Group B screening as per the requirements of MIL-STD-981.
- **Class B:** Suited for non-critical flight operations and non-essential ground support missions. The quality assurance process for these components encompasses Group A screening as per the requirementsof MIL-STD-981.

PART IDENTIFYING NUMBER

S10001 F K S

Coast/ACM Part Number
Termination Finish
Inductance Tolerance
Product Class

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

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

S: Product Class
S: Class S *B: Class B*

Fixed Chip Inductors – S10000 Series

With Tabs		Without Tabs		Inductance (µH)	Test Frequency (MHz)	Q (min)	Q Typ	SRF (min) MHz	DCR (max) ohms	Current (max) mA
DashNumber	C/ACM P/N	DashNumber	C/ACM P/N							
M83446/10-01	S10001	M83446/10-62	S10062	0.010 ±10%	150	60	65	2000	.04	1000
M83446/10-02	S10002	M83446/10-63	S10063	0.012 ±10%	150	70	82	1800	.04	1000
M83446/10-03	S10003	M83446/10-64	S10064	0.015 ±10%	150	75	87	1500	.04	1000
M83446/10-04	S10004	M83446/10-65	S10065	0.018 ±10%	150	75	87	1500	.04	1000
M83446/10-05	S10005	M83446/10-66	S10066	0.022 ±10%	100	60	65	1300	.05	1000
M83446/10-06	S10006	M83446/10-67	S10067	0.027 ±10%	100	60	70	1300	.05	1000
M83446/10-07	S10007	M83446/10-68	S10068	0.033 ±10%	100	60	70	1000	.05	1000
M83446/10-08	S10008	M83446/10-69	S10069	0.039 ±10%	100	60	70	1000	.06	900
M83446/10-09	S10009	M83446/10-70	S10070	0.047 ±10%	100	65	75	800	.06	900
M83446/10-10	S10010	M83446/10-71	S10071	0.056 ±10%	100	65	75	760	.06	900
M83446/10-11	S10011	M83446/10-72	S10072	0.068 ±10%	100	65	75	700	.07	840
M83446/10-12	S10012	M83446/10-73	S10073	0.082 ±10%	100	65	75	650	.07	840
M83446/10-13	S10013	M83446/10-74	S10074	0.100 ±10%	50	65	77	570	.07	840
M83446/10-14	S10014	M83446/10-75	S10075	0.120 ±10%	50	65	77	520	.07	840
M83446/10-15	S10015	M83446/10-76	S10076	0.150 ±10%	50	75	87	400	.08	790
M83446/10-16	S10016	M83446/10-77	S10077	0.180 ±10%	50	75	87	360	.08	790
M83446/10-17	S10017	M83446/10-78	S10078	0.220 ±10%	50	70	80	320	.08	790
M83446/10-18	S10018	M83446/10-79	S10079	0.270 ±10%	50	70	80	270	.10	700
M83446/10-19	S10019	M83446/10-80	S10080	0.330 ±10%	50	70	80	240	.10	700
M83446/10-20	S10020	M83446/10-81	S10081	0.390 ±10%	50	70	80	220	.10	700
M83446/10-21	S10021	M83446/10-82	S10082	0.470 ±10%	25	70	80	190	.14	590
M83446/10-22	S10022	M83446/10-83	S10083	0.560 ±10%	25	70	82	170	.19	510
M83446/10-23	S10023	M83446/10-84	S10084	0.680 ±10%	25	70	83	160	.26	430
M83446/10-24	S10024	M83446/10-85	S10085	0.820 ±10%	25	75	84	150	.30	400
M83446/10-25	S10025	M83446/10-86	S10086	1.00 ±10%	25	75	87	130	.34	380
M83446/10-26	S10026	M83446/10-87	S10087	1.20 ±10%	7.9	65	73	120	.45	330
M83446/10-27	S10027	M83446/10-88	S10088	1.50 ±10%	7.9	65	73	110	.57	290
M83446/10-28	S10028	M83446/10-89	S10089	1.80 ±10%	7.9	65	73	100	.72	260
M83446/10-29	S10029	M83446/10-90	S10090	2.20 ±10%	7.9	65	73	80	.9	230
M83446/10-30	S10030	M83446/10-91	S10091	2.70 ±10%	7.9	65	73	60	1.1	210
M83446/10-31	S10031	M83446/10-92	S10092	3.30 ±10%	7.9	60	70	50	1.2	200
M83446/10-32	S10032	M83446/10-93	S10093	3.90 ±10%	7.9	60	70	45	1.4	180
M83446/10-33	S10033	M83446/10-94	S10094	4.70 ±10%	7.9	60	70	42	1.6	170
M83446/10-34	S10034	M83446/10-95	S10095	5.60 ±10%	7.9	65	75	40	1.8	160
M83446/10-35	S10035	M83446/10-96	S10096	6.80 ±10%	7.9	65	75	37	2.4	140
M83446/10-36	S10036	M83446/10-97	S10097	8.20 ±10%	7.9	65	75	34	3.0	130
M83446/10-37	S10037	M83446/10-98	S10098	10.0 ±10%	7.9	65	75	29	3.5	120
M83446/10-38	S10038	M83446/10-99	S10099	12.0 ±10%	2.5	60	70	27	3.6	118
M83446/10-39	S10039	M83446/10-100	S10100	15.0 ±10%	2.5	60	70	22	3.7	115
M83446/10-40	S10040	M83446/10-101	S10101	18.0 ±10%	2.5	60	72	17	3.8	114
M83446/10-41	S10041	M83446/10-102	S10102	22.0 ±10%	2.5	60	72	16	3.9	113
M83446/10-42	S10042	M83446/10-103	S10103	27.0 ±10%	2.5	65	75	15	4.0	110
M83446/10-43	S10043	M83446/10-104	S10104	33.0 ±10%	2.5	65	75	14	5.0	100
M83446/10-44	S10044	M83446/10-105	S10105	39.0 ±10%	2.5	65	75	13	7.0	84
M83446/10-45	S10045	M83446/10-106	S10106	47.0 ±10%	2.5	70	78	12	8.0	79
M83446/10-46	S10046	M83446/10-107	S10107	56.0 ±10%	2.5	70	78	11	10.0	70
M83446/10-47	S10047	M83446/10-108	S10108	68.0 ±10%	2.5	65	75	10	11.0	67
M83446/10-48	S10048	M83446/10-109	S10109	82.0 ±10%	2.5	60	72	9	12.0	64
M83446/10-49	S10049	M83446/10-110	S10110	100.0 ±10%	2.5	60	70	8	13.0	62
M83446/10-50	S10050	M83446/10-111	S10111	120.0 ±10%	0.79	40	48	7	14.0	59
M83446/10-51	S10051	M83446/10-112	S10112	150.0 ±10%	0.79	40	48	6	16.0	56
M83446/10-52	S10052	M83446/10-113	S10113	180.0 ±10%	0.79	40	48	5	18.0	52
M83446/10-53	S10053	M83446/10-114	S10114	220.0 ±10%	0.79	40	48	4	24.0	45
M83446/10-54	S10054	M83446/10-115	S10115	270.0 ±10%	0.79	40	48	3.3	25.0	44
M83446/10-55	S10055	M83446/10-116	S10116	330.0 ±10%	0.79	40	48	3.1	29.0	41
M83446/10-56	S10056	M83446/10-117	S10117	390.0 ±10%	0.79	40	48	2.9	32.0	39
M83446/10-57	S10057	M83446/10-118	S10118	470.0 ±10%	0.79	35	45	2.4	35.0	37
M83446/10-58	S10058	M83446/10-119	S10119	560.0 ±10%	0.79	35	45	2.1	45.0	33
M83446/10-59	S10059	M83446/10-120	S10120	680.0 ±10%	0.79	35	40	1.9	55.0	30
M83446/10-60	S10060	M83446/10-121	S10121	820.0 ±10%	0.79	30	36	1.8	70.0	26
M83446/10-61	S10061	M83446/10-122	S10122	1000.0 ±10%	0.79	30	36	1.7	80.0	25