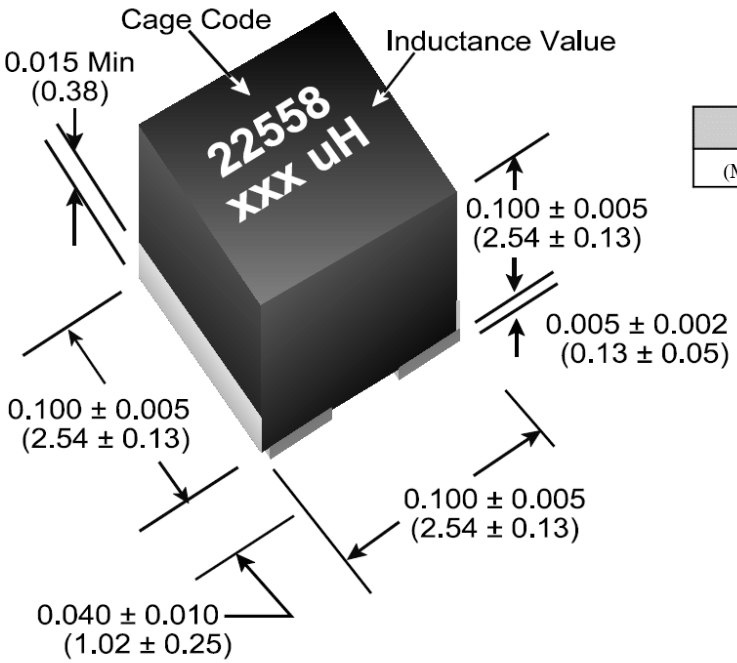
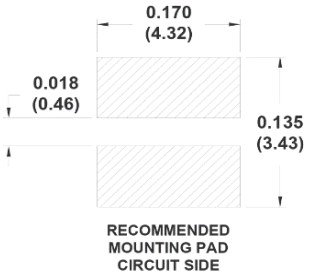
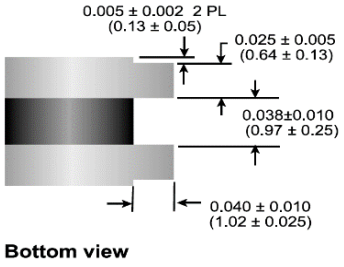
Fixed Chip Inductors – 13000 Series



Inches
(Millimeters)

MIL-PRF-83446
Qualified Products List (QPL)
QPL: M83446/13





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:** 0.02 gram, maximum
- **Dielectric Withstanding Voltage:** Method 301 of MIL-STD-202, test voltage 700 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

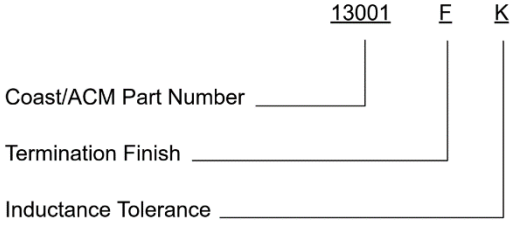
- Transfer Molded Package
- Laser Marking
- Leadless device for minimum footprint
- Internal Welded Terminations
- Low EMI Radiation
- Low Thermal Expansion permits mounting on most substrate materials
- Termination Finish Options available (additional charge)
- Tighter Tolerances available (additional charge)
- Tape and Reel Packaging Available (additional charge)
  Full Reel Quantity (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 S13000 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 – 13000 Series

Dash Number	C/ACM P/N	Inductance (µH)	Test Frequency (MHz)	Q (min)	Q Typ	SRF (min) MHz	DCR (max) ohms	Rated Current Max (mA)	Incremental Current (mA)
M83446/13-01	13001	0.010 ±10%	200	45	60	1200	.020	750	----
M83446/13-02	13002	0.012 ±10%	200	45	60	1200	.025	750	----
M83446/13-03	13003	0.015 ±10%	200	45	60	1200	.035	750	----
M83446/13-04	13004	0.018 ±10%	200	45	60	1200	.040	750	----
M83446/13-05	13005	0.022 ±10%	200	45	60	1000	.045	750	----
M83446/13-06	13006	0.027 ±10%	200	45	55	1000	.050	750	----
M83446/13-07	13007	0.033 ±10%	200	45	55	1000	.055	640	----
M83446/13-08	13008	0.039 ±10%	200	45	55	1000	.060	600	----
M83446/13-09	13009	0.047 ±10%	100	45	50	1000	.065	550	----
M83446/13-10	13010	0.056 ±10%	100	45	50	1000	.060	520	----
M83446/13-11	13011	0.068 ±10%	100	40	45	800	.060	480	----
M83446/13-12	13012	0.082 ±10%	100	35	40	800	.080	470	----
M83446/13-13	13013	0.100 ±10%	25.0	35	40	750	.160	460	----
M83446/13-14	13014	0.120 ±10%	25.0	35	40	700	.170	455	----
M83446/13-15	13015	0.150 ±10%	25.0	35	40	650	.190	450	----
M83446/13-16	13016	0.180 ±10%	25.0	35	40	600	.200	430	----
M83446/13-17	13017	0.220 ±10%	25.0	35	40	550	.300	350	----
M83446/13-18	13018	0.270 ±10%	25.0	35	40	480	.350	310	----
M83446/13-19	13019	0.330 ±10%	25.0	35	40	400	.720	280	----
M83446/13-20	13020	0.390 ±10%	25.0	35	40	380	.80	250	----
M83446/13-21	13021	0.470 ±10%	25.0	35	40	350	1.26	230	----
M83446/13-22	13022	0.560 ±10%	25.0	35	40	330	1.30	220	----
M83446/13-23	13023	0.680 ±10%	25.0	35	40	300	1.40	210	----
M83446/13-24	13024	0.820 ±10%	25.0	35	40	250	1.50	200	----
M83446/13-25	13025	1.0 ±10%	25.0	35	40	220	1.60	200	----
M83446/13-26	13026	1.2 ±10%	7.90	32	40	200	1.70	200	----
M83446/13-27	13027	1.5 ±10%	7.90	32	40	175	2.00	190	----
M83446/13-28	13028	1.8 ±10%	7.90	32	40	150	2.00	185	----
M83446/13-29	13029	2.2 ±10%	7.90	32	40	95	2.00	180	----
M83446/13-30	13030	2.7 ±10%	7.90	30	35	85	2.00	175	----
M83446/13-31	13031	3.3 ±10%	7.90	30	35	70	2.00	170	----
M83446/13-32	13032	3.9 ±10%	7.90	30	35	60	2.10	165	----
M83446/13-33	13033	4.7 ±10%	7.90	30	35	50	2.30	165	----
M83446/13-34	13034	5.6 ±10%	7.90	30	35	40	2.50	165	----
M83446/13-35	13035	6.8 ±10%	7.90	30	35	30	2.50	165	----
M83446/13-36	13036	8.2 ±10%	7.90	27	32	22	2.50	120	----
M83446/13-37	13037	10 ±10%	7.90	35	40	20	2.90	105	58
M83446/13-38	13038	12 ±10%	2.50	35	40	15	3.00	91	53
M83446/13-39	13039	15 ±10%	2.50	35	40	13	3.00	87	50
M83446/13-40	13040	18 ±10%	2.50	35	40	12	3.20	81	46
M83446/13-41	13041	22 ±10%	2.50	35	40	10	4.00	77	37
M83446/13-42	13042	27 ±10%	2.50	35	40	9.0	4.00	73	34
M83446/13-43	13043	33 ±10%	2.50	35	40	9.0	4.50	69	32
M83446/13-44	13044	39 ±10%	2.50	35	40	6.5	5.00	65	29
M83446/13-45	13045	47 ±10%	2.50	35	40	6.2	5.70	63	29
M83446/13-46	13046	56 ±10%	2.50	35	40	6.0	6.00	60	28
M83446/13-47	13047	68 ±10%	2.50	35	40	5.8	6.70	57	26
M83446/13-48	13048	82 ±10%	2.50	30	40	5.2	7.50	55	23
M83446/13-49	13049	100 ±10%	2.50	30	35	4.0	13.0	50	20
M83446/13-50	13050	120 ±10%	0.790	28	30	4.0	14.0	40	20
M83446/13-51	13051	150 ±10%	0.790	28	30	3.9	18.0	36	20
M83446/13-52	13052	180 ±10%	0.790	28	30	3.5	20.0	33	19
M83446/13-53	13053	220 ±10%	0.790	28	30	3.2	21.0	28	18
M83446/13-54	13054	270 ±10%	0.790	20	25	3.1	25.0	25	17
M83446/13-55	13055	330 ±10%	0.790	20	25	2.8	37.0	20	16
M83446/13-56	13056	390 ±10%	0.790	20	25	2.5	39.0	17	16
M83446/13-57	13057	470 ±10%	0.790	20	25	2.3	45.0	15	15
M83446/13-58	13058	560 ±10%	0.790	20	25	2.2	57.0	13	14
M83446/13-59	13059	680 ±10%	0.790	20	25	2.1	62.0	12	13
M83446/13-60	13060	820 ±10%	0.790	18	20	2.1	78.0	11	11
M83446/13-61	13061	1000 ±10%	0.790	10	15	1.1	96.0	10	10