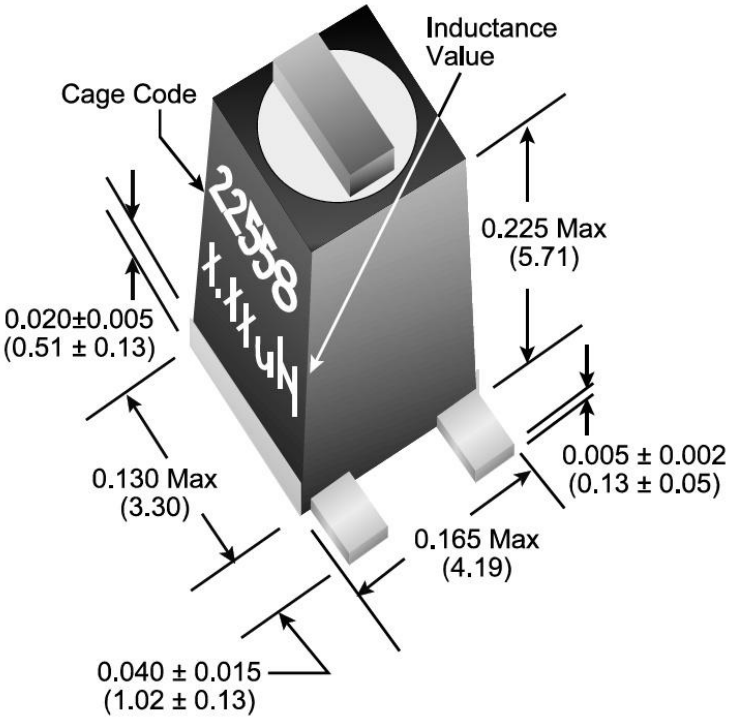
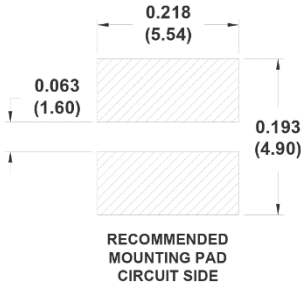
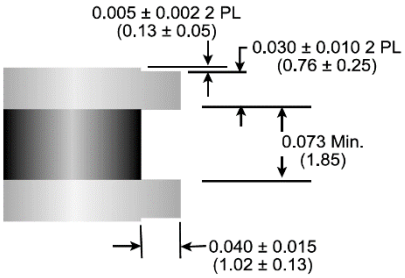
Variable Chip Inductors – 9000 Series



Inches
(Millimeters)

MIL-PRF-83446
Qualified Products List (QPL)
QPL: M83446/09





Bottom view

SPECIFICATIONS

- **Inductance:** 0.015 µH to 150 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 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

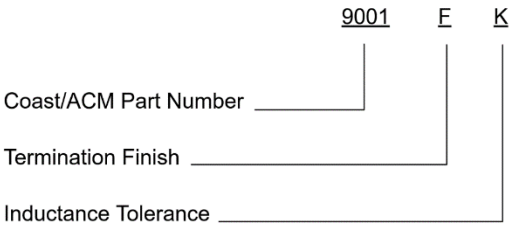
- Transfer Molded Package
- Laser Marking
- Leadless device for minimum footprint
- Internal Welded Terminations
- Low EMI Radiation
- Low Thermal Expansion permits mounting on most substrate materials
- Termination Finish Options available (additional charge)
- Tighter Tolerances available (additional 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 S9000 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%*

Variable Chip Inductors – 9000 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	Min	Nom	Max						
M83446/09-01	9001	M83446/09-48	9048	0.015	0.018	0.021	150	50	60	1200	.03	750
M83446/09-02	9002	M83446/09-49	9049	0.018	0.022	0.026	150	55	65	1100	.03	750
M83446/09-03	9003	M83446/09-50	9050	0.022	0.027	0.032	150	55	65	1000	.03	750
M83446/09-04	9004	M83446/09-51	9051	0.027	0.033	0.039	150	55	65	900	.04	750
M83446/09-05	9005	M83446/09-52	9052	0.033	0.039	0.047	150	55	65	750	.04	750
M83446/09-06	9006	M83446/09-53	9053	0.039	0.047	0.056	100	55	65	660	.04	750
M83446/09-07	9007	M83446/09-54	9054	0.047	0.056	0.068	100	55	65	610	.05	700
M83446/09-08	9008	M83446/09-55	9055	0.055	0.068	0.083	100	55	65	550	.05	700
M83446/09-09	9009	M83446/09-56	9056	0.067	0.082	0.099	100	55	65	520	.06	645
M83446/09-10	9010	M83446/09-57	9057	0.080	0.100	0.120	100	55	65	490	.06	645
M83446/09-11	9011	M83446/09-58	9058	0.096	0.120	0.144	50	50	60	460	.07	600
M83446/09-12	9012	M83446/09-59	9059	0.12	0.15	0.18	50	50	60	430	.08	560
M83446/09-13	9013	M83446/09-60	9060	0.14	0.18	0.22	50	50	60	385	.09	525
M83446/09-14	9014	M83446/09-61	9061	0.17	0.22	0.27	50	45	51	330	.10	500
M83446/09-15	9015	M83446/09-62	9062	0.21	0.27	0.33	50	45	51	300	.15	400
M83446/09-16	9016	M83446/09-63	9063	0.26	0.33	0.40	50	45	51	275	.19	360
M83446/09-17	9017	M83446/09-64	9064	0.32	0.39	0.47	50	40	50	240	.25	300
M83446/09-18	9018	M83446/09-65	9065	0.37	0.47	0.57	25	40	50	210	.30	280
M83446/09-19	9019	M83446/09-66	9066	0.46	0.56	0.68	25	40	50	190	.40	250
M83446/09-20	9020	M83446/09-67	9067	0.54	0.68	0.82	25	40	50	165	.60	200
M83446/09-21	9021	M83446/09-68	9068	0.68	0.82	1.00	25	40	50	155	.70	180
M83446/09-22	9022	M83446/09-69	9069	0.75	1.00	1.25	25	40	50	140	.90	160
M83446/09-23	9023	M83446/09-70	9070	0.90	1.20	1.50	25	35	44	125	1.1	150
M83446/09-24	9024	M83446/09-71	9071	1.13	1.50	1.87	7.9	30	38	115	1.3	135
M83446/09-25	9025	M83446/09-72	9072	1.35	1.80	2.25	7.9	30	38	105	1.7	120
M83446/09-26	9026	M83446/09-73	9073	1.65	2.20	2.75	7.9	30	38	100	2.3	100
M83446/09-27	9027	M83446/09-74	9074	2.02	2.70	3.37	7.9	25	35	85	3.0	90
M83446/09-28	9028	M83446/09-75	9075	2.48	3.30	4.12	7.9	25	35	75	3.9	80
M83446/09-29	9029	M83446/09-76	9076	2.92	3.9	4.87	7.9	25	33	47	3.9	80
M83446/09-30	9030	M83446/09-77	9077	3.52	4.7	5.88	7.9	25	33	30	3.9	80
M83446/09-31	9031	M83446/09-78	9078	4.2	5.6	7.0	7.9	22	30	24	4.0	75
M83446/09-32	9032	M83446/09-79	9079	5.1	6.8	8.5	7.9	22	30	23	4.0	75
M83446/09-33	9033	M83446/09-80	9080	6.1	8.2	10.2	7.9	22	30	22	4.5	72
M83446/09-34	9034	M83446/09-81	9081	7.5	10.0	12.5	7.9	22	30	21	4.5	72
M83446/09-35	9035	M83446/09-82	9082	9.0	12.0	15.0	7.9	22	30	17	5.0	70
M83446/09-36	9036	M83446/09-83	9083	11.2	15.0	18.7	2.5	22	30	15	6.0	65
M83446/09-37	9037	M83446/09-84	9084	13.5	18.0	22.5	2.5	22	30	14	8.0	55
M83446/09-38	9038	M83446/09-85	9085	16.5	22.0	27.5	2.5	22	30	13	10.0	50
M83446/09-39	9039	M83446/09-86	9086	20.2	27.0	31.3	2.5	22	30	11	11.0	45
M83446/09-40	9040	M83446/09-87	9087	24.7	33.0	41.2	2.5	22	30	10	13.0	43
M83446/09-41	9041	M83446/09-88	9088	29.2	39.0	48.8	2.5	22	30	9	14.0	42
M83446/09-42	9042	M83446/09-89	9089	35.2	47.0	58.8	2.5	22	30	8	15.0	40
M83446/09-43	9043	M83446/09-90	9090	42.0	56.0	70.0	2.5	22	30	7	19.0	36
M83446/09-44	9044	M83446/09-91	9091	51.0	68.0	85.0	2.5	22	30	6	24.0	32
M83446/09-45	9045	M83446/09-92	9092	62.0	82.0	102.0	2.5	25	33	5	31.0	28
M83446/09-46	9046	M83446/09-93	9093	75.0	100.0	125.0	2.5	25	33	4	40.0	25
M83446/09-47	9047	M83446/09-94	9094	90.0	120.0	150.0	2.5	25	33	3	50.0	22