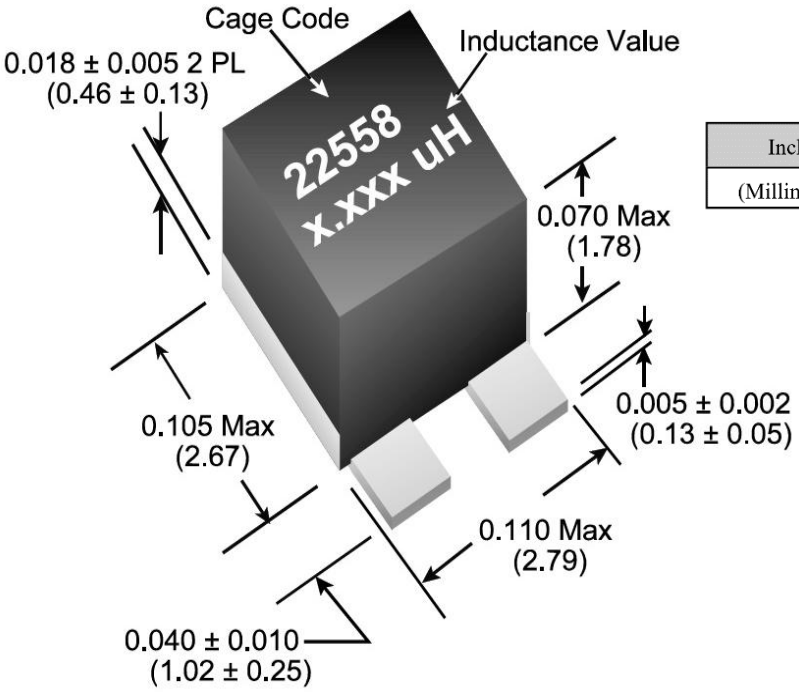
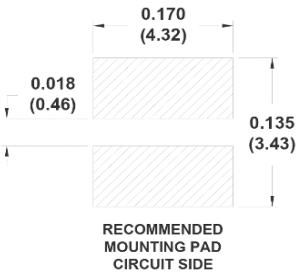
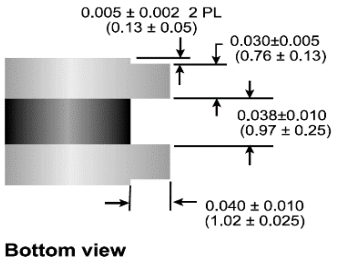
Fixed Chip Inductors – S8000 Series



Inches
(Millimeters)

MIL-STD-98
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
- **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 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

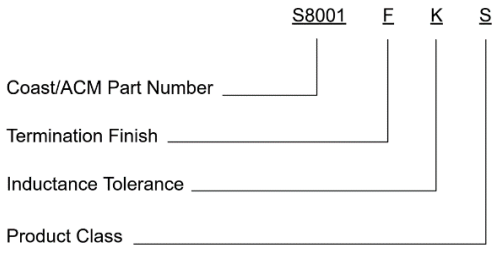
- Transfer Molded Package
- Laser Marking
- Leadless device for minimum footprint
- Internal Welded Terminations
- Low EMI Radiation
- Low Thermal Expansion permits mounting on most substrate materials
- Outgassing meets NASA spec SP-R-0022A: TML < 1%
- Termination Finish Options available (additional charge)
- Tighter Tolerances available (additional charge)
- Tape and Reel Packaging Available (additional charge)
  Full Reel Quantity (Tabs): 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

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 requirements of MIL-STD-981.

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%*

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

COAST ACM

Fixed Chip Inductors – S8000 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							
M83446/08-01	S8001	M83446/08-50	S8050	0.010 ±10%	150	50	55	2000	.025	750
M83446/08-02	S8002	M83446/08-51	S8051	0.012 ±10%	150	50	55	2000	.025	750
M83446/08-03	S8003	M83446/08-52	S8052	0.015 ±10%	150	50	55	1800	.040	750
M83446/08-04	S8004	M83446/08-53	S8053	0.018 ±10%	150	50	55	1500	.040	750
M83446/08-05	S8005	M83446/08-54	S8054	0.022 ±10%	100	45	50	1400	.040	750
M83446/08-06	S8006	M83446/08-55	S8055	0.027 ±10%	100	45	50	1200	.040	750
M83446/08-07	S8007	M83446/08-56	S8056	0.033 ±10%	100	47	55	1100	.050	640
M83446/08-08	S8008	M83446/08-57	S8057	0.039 ±10%	100	47	55	1000	.07	600
M83446/08-09	S8009	M83446/08-58	S8058	0.047 ±10%	100	47	55	900	.08	550
M83446/08-10	S8010	M83446/08-59	S8059	0.056 ±10%	100	47	55	850	.09	520
M83446/08-11	S8011	M83446/08-60	S8060	0.068 ±10%	100	47	55	840	.10	480
M83446/08-12	S8012	M83446/08-61	S8061	0.082 ±10%	100	47	55	750	.11	470
M83446/08-13	S8013	M83446/08-62	S8062	0.100 ±10%	50	47	55	580	.11	470
M83446/08-14	S8014	M83446/08-63	S8063	0.120 ±10%	50	47	55	240	.11	470
M83446/08-15	S8015	M83446/08-64	S8064	0.150 ±10%	50	47	55	230	.12	450
M83446/08-16	S8016	M83446/08-65	S8065	0.180 ±10%	50	51	60	230	.14	430
M83446/08-17	S8017	M83446/08-66	S8066	0.220 ±10%	50	51	60	230	.20	350
M83446/08-18	S8018	M83446/08-67	S8067	0.270 ±10%	50	51	60	230	.25	310
M83446/08-19	S8019	M83446/08-68	S8068	0.330 ±10%	50	51	60	200	.30	280
M83446/08-20	S8020	M83446/08-69	S8069	0.390 ±10%	50	47	55	190	.45	240
M83446/08-21	S8021	M83446/08-70	S8070	0.470 ±10%	25	47	55	180	.50	230
M83446/08-22	S8022	M83446/08-71	S8071	0.560 ±10%	25	45	53	170	.50	230
M83446/08-23	S8023	M83446/08-72	S8072	0.680 ±10%	25	45	53	160	.50	230
M83446/08-24	S8024	M83446/08-73	S8073	0.820 ±10%	25	45	53	150	.50	230
M83446/08-25	S8025	M83446/08-74	S8074	1.00 ±10%	25	45	53	130	.50	230
M83446/08-26	S8026	M83446/08-75	S8075	1.20 ±10%	7.9	36	43	120	.60	200
M83446/08-27	S8027	M83446/08-76	S8076	1.50 ±10%	7.9	36	43	100	1.1	160
M83446/08-28	S8028	M83446/08-77	S8077	1.80 ±10%	7.9	38	45	90	1.1	160
M83446/08-29	S8029	M83446/08-78	S8078	2.20 ±10%	7.9	38	45	85	1.5	130
M83446/08-30	S8030	M83446/08-79	S8079	2.70 ±10%	7.9	41	48	80	1.7	125
M83446/08-31	S8031	M83446/08-80	S8080	3.30 ±10%	7.9	42	50	75	1.8	120
M83446/08-32	S8032	M83446/08-81	S8081	3.90 ±10%	7.9	42	50	65	2.0	110
M83446/08-33	S8033	M83446/08-82	S8082	4.70 ±10%	7.9	41	48	55	2.3	100
M83446/08-34	S8034	M83446/08-83	S8083	5.60 ±10%	7.9	41	48	45	2.6	98
M83446/08-35	S8035	M83446/08-84	S8084	6.80 ±10%	7.9	36	43	40	2.8	94
M83446/08-36	S8036	M83446/08-85	S8085	8.20 ±10%	7.9	36	43	35	3.0	90
M83446/08-37	S8037	M83446/08-86	S8086	10.0 ±10%	7.9	36	43	33	3.3	87
M83446/08-38	S8038	M83446/08-87	S8087	12.0 ±10%	7.9	36	43	26	4.0	79
M83446/08-39	S8039	M83446/08-88	S8088	15.0 ±10%	2.5	32	38	24	4.2	79
M83446/08-40	S8040	M83446/08-89	S8089	18.0 ±10%	2.5	32	38	21	4.4	75
M83446/08-41	S8041	M83446/08-90	S8090	22.0 ±10%	2.5	32	38	19	7.5	57
M83446/08-42	S8042	M83446/08-91	S8091	27.0 ±10%	2.5	32	38	14	8.0	55
M83446/08-43	S8043	M83446/08-92	S8092	33.0 ±10%	2.5	30	35	12	13.0	45
M83446/08-44	S8044	M83446/08-93	S8093	39.0 ±10%	2.5	30	35	10	17.0	38
M83446/08-45	S8045	M83446/08-94	S8094	47.0 ±10%	2.5	30	35	9.0	19.0	36
M83446/08-46	S8046	M83446/08-95	S8095	56.0 ±10%	2.5	30	35	8.5	23.0	33
M83446/08-47	S8047	M83446/08-96	S8096	68.0 ±10%	2.5	30	35	8.2	25.0	32
M83446/08-48	S8048	M83446/08-97	S8097	82.0 ±10%	2.5	30	35	8.0	28.0	30
M83446/08-49	S8049	M83446/08-98	S8098	100.0 ±10%	2.5	30	35	7.0	31.0	28