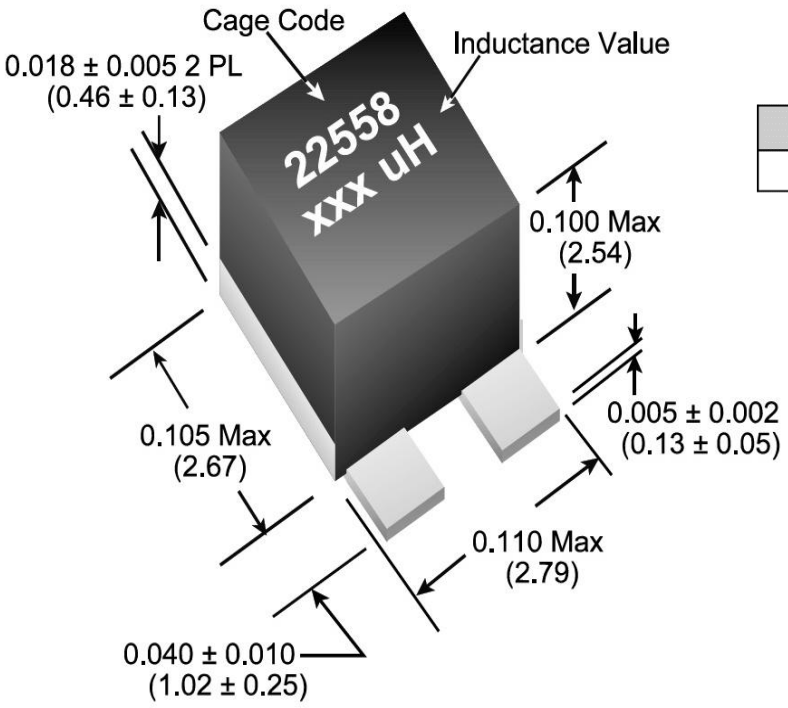
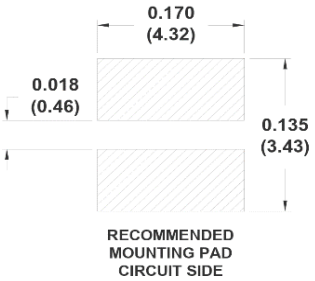
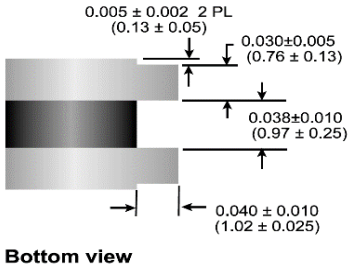
Fixed Chip Inductors – S6000 Series



Inches
(Millimeters)

MIL-STD-981
MIL-PRF-83446
Qualified Products List (QPL)
QPL: M83446/06





SPECIFICATIONS

- **Inductance:** 12 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 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 Optionsavailable (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

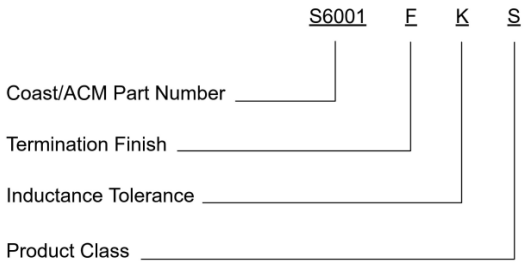
APPLICATIONS

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*

Fixed Chip Inductors – S6000 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							
M83446/06-01	S6001	M83446/06-25	S6025	12.0 ±10%	2.50	42	50	26.0	2.0	110
M83446/06-02	S6002	M83446/06-26	S6026	15.0 ±10%	2.50	44	52	24.0	2.2	105
M83446/06-03	S6003	M83446/06-27	S6027	18.0 ±10%	2.50	44	52	21.0	2.8	100
M83446/06-04	S6004	M83446/06-28	S6028	22.0 ±10%	2.50	48	55	20.0	3.5	85
M83446/06-05	S6005	M83446/06-29	S6029	27.0 ±10%	2.50	49	57	19.0	4.3	75
M83446/06-06	S6006	M83446/06-30	S6030	33.0 ±10%	2.50	50	58	14.0	5.5	68
M83446/06-07	S6007	M83446/06-31	S6031	39.0 ±10%	2.50	52	60	12.0	6.5	61
M83446/06-08	S6008	M83446/06-32	S6032	47.0 ±10%	2.50	53	62	11.0	8.5	54
M83446/06-09	S6009	M83446/06-33	S6033	56.0 ±10%	2.50	56	64	10.0	12.0	46
M83446/06-10	S6010	M83446/06-34	S6034	68.0 ±10%	2.50	53	62	9.0	13.0	42
M83446/06-11	S6011	M83446/06-35	S6035	82.0 ±10%	2.50	49	57	8.0	15.0	40
M83446/06-12	S6012	M83446/06-36	S6036	100.0 ±10%	2.50	49	57	7.0	18.0	36
M83446/06-13	S6013	M83446/06-37	S6037	120.0 ±10%	0.79	37	45	6.0	21.0	34
M83446/06-14	S6014	M83446/06-38	S6038	150.0 ±10%	0.79	30	38	5.0	26.0	31
M83446/06-15	S6015	M83446/06-39	S6039	180.0 ±10%	0.79	30	38	5.0	28.0	29
M83446/06-16	S6016	M83446/06-40	S6040	220.0 ±10%	0.79	26	32	4.5	32.0	28
M83446/06-17	S6017	M83446/06-41	S6041	270.0 ±10%	0.79	26	32	4.0	36.0	26
M83446/06-18	S6018	M83446/06-42	S6042	330.0 ±10%	0.79	24	30	3.7	42.0	24
M83446/06-19	S6019	M83446/06-43	S6043	390.0 ±10%	0.79	24	30	3.5	46.0	23
M83446/06-20	S6020	M83446/06-44	S6044	470.0 ±10%	0.79	24	30	3.0	68.0	19
M83446/06-21	S6021	M83446/06-45	S6045	560.0 ±10%	0.79	22	28	2.8	77.0	18
M83446/06-22	S6022	M83446/06-46	S6046	680.0 ±10%	0.79	20	26	2.5	85.0	17
M83446/06-23	S6023	M83446/06-47	S6047	820.0 ±10%	0.79	16	22	2.0	100.0	16
M83446/06-24	S6024	M83446/06-48	S6048	1000.0 ±10%	0.79	12	18	1.5	120.0	15