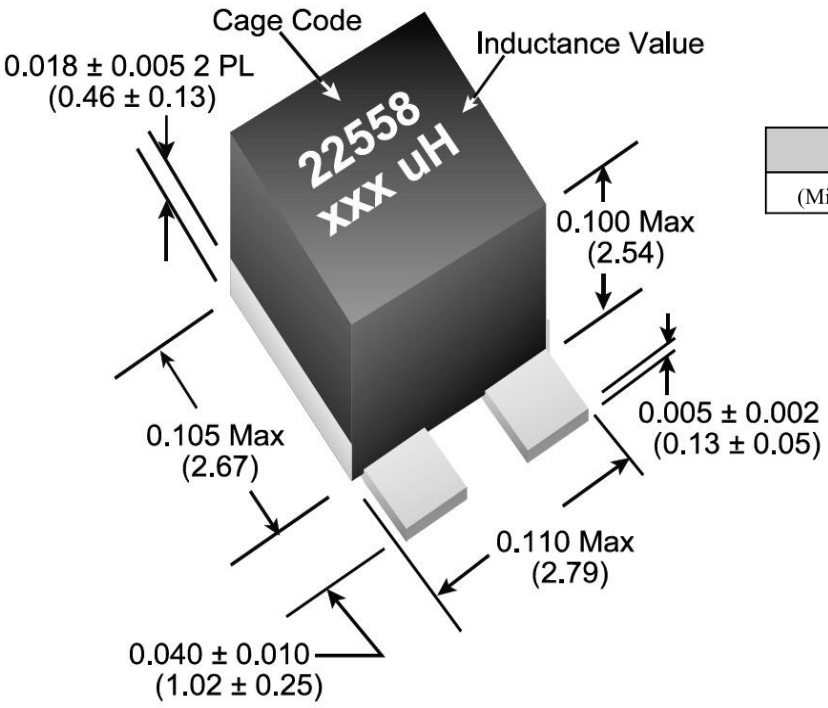
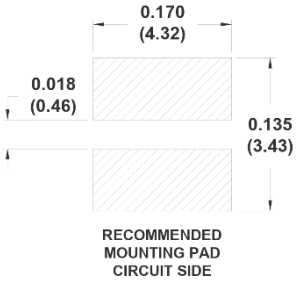
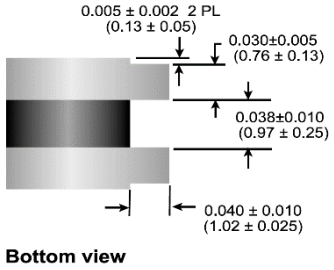
Fixed Chip Inductors – 6000 Series



Inches
(Millimeters)

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
- **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

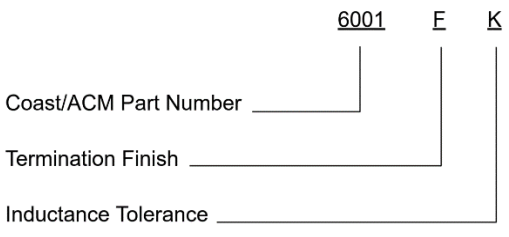
- Transfer Molded Package
- Laser Marking
- Leadless device for minimum footprint
- Internal Welded Terminations
- Low EMI Radiation
- Low Thermal Expansion permits mounting on most substrate materials
- Termination Finish Options available (additional charge)
- Tighter Tolerances available (additional 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
- Available for Space Application per MIL-STD-981 (see S6000 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 – 6000 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							
M83446/06-01	6001	M83446/06-25	6025	12.0 ±10%	2.50	42	50	26.0	2.0	110
M83446/06-02	6002	M83446/06-26	6026	15.0 ±10%	2.50	44	52	24.0	2.2	105
M83446/06-03	6003	M83446/06-27	6027	18.0 ±10%	2.50	44	52	21.0	2.8	100
M83446/06-04	6004	M83446/06-28	6028	22.0 ±10%	2.50	48	55	20.0	3.5	85
M83446/06-05	6005	M83446/06-29	6029	27.0 ±10%	2.50	49	57	19.0	4.3	75
M83446/06-06	6006	M83446/06-30	6030	33.0 ±10%	2.50	50	58	14.0	5.5	68
M83446/06-07	6007	M83446/06-31	6031	39.0 ±10%	2.50	52	60	12.0	6.5	61
M83446/06-08	6008	M83446/06-32	6032	47.0 ±10%	2.50	53	62	11.0	8.5	54
M83446/06-09	6009	M83446/06-33	6033	56.0 ±10%	2.50	56	64	10.0	12.0	46
M83446/06-10	6010	M83446/06-34	6034	68.0 ±10%	2.50	53	62	9.0	13.0	42
M83446/06-11	6011	M83446/06-35	6035	82.0 ±10%	2.50	49	57	8.0	15.0	40
M83446/06-12	6012	M83446/06-36	6036	100.0 ±10%	2.50	49	57	7.0	18.0	36
M83446/06-13	6013	M83446/06-37	6037	120.0 ±10%	0.79	37	45	6.0	21.0	34
M83446/06-14	6014	M83446/06-38	6038	150.0 ±10%	0.79	30	38	5.0	26.0	31
M83446/06-15	6015	M83446/06-39	6039	180.0 ±10%	0.79	30	38	5.0	28.0	29
M83446/06-16	6016	M83446/06-40	6040	220.0 ±10%	0.79	26	32	4.5	32.0	28
M83446/06-17	6017	M83446/06-41	6041	270.0 ±10%	0.79	26	32	4.0	36.0	26
M83446/06-18	6018	M83446/06-42	6042	330.0 ±10%	0.79	24	30	3.7	42.0	24
M83446/06-19	6019	M83446/06-43	6043	390.0 ±10%	0.79	24	30	3.5	46.0	23
M83446/06-20	6020	M83446/06-44	6044	470.0 ±10%	0.79	24	30	3.0	68.0	19
M83446/06-21	6021	M83446/06-45	6045	560.0 ±10%	0.79	22	28	2.8	77.0	18
M83446/06-22	6022	M83446/06-46	6046	680.0 ±10%	0.79	20	26	2.5	85.0	17
M83446/06-23	6023	M83446/06-47	6047	820.0 ±10%	0.79	16	22	2.0	100.0	16
M83446/06-24	6024	M83446/06-48	6048	1000.0 ±10%	0.79	12	18	1.5	120.0	15