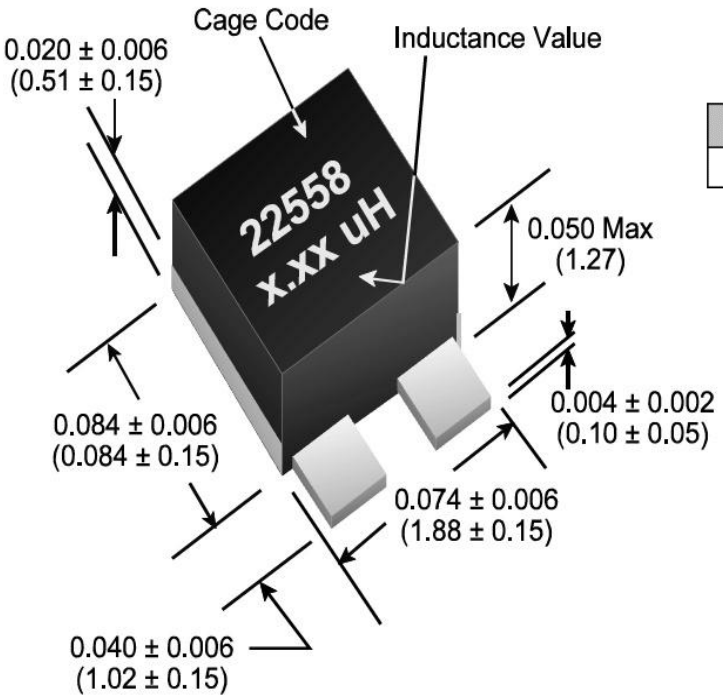
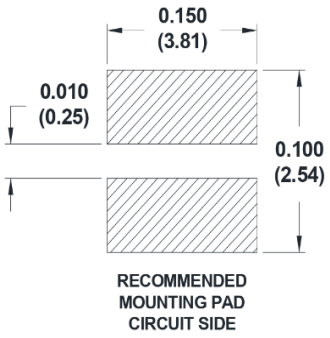
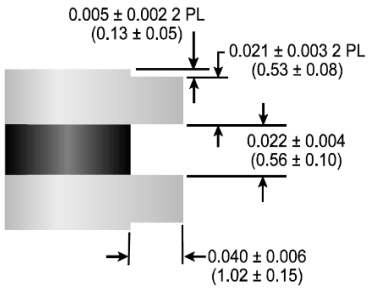
Fixed Chip Inductors – 6500 Series



Inches
(Millimeters)

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





Bottom view

SPECIFICATIONS

- **Inductance:** 0.005 µH to 10 µH
- **Standard Tolerance:** ±10%
- **Operating Temperature:** -55°C to +125°C
- **Storage Temperature:** -60°C to +130°C
- **Standard Termination Finish:** Tin-lead
- **Weight:** 0.57 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

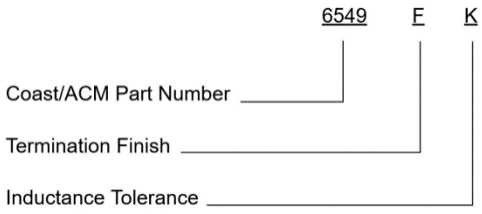
- Transfer Molded Package
- Laser Marking
- Leadless device for minimum footprint
- Internal Welded Terminations
- Low EMI Radiation
- Low Thermal Expansion permits mounting on most substrate materials
- Termination Finish Options available (additional charge)
- Tighter Tolerances available (additional charge)
- Tape and Reel Packaging Available (additional charge)
  Full Reel Quantity (Tabs): 2600 pieces
  Full Reel Quantity (No Tabs): 3000 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 S6500 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 – 6500 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							
M83446/06-49	6549	M83446/06-88	6588	0.005 ±10%	200	32	40	1900	.10	750
M83446/06-50	6550	M83446/06-89	6589	0.008 ±10%	200	32	40	1800	.10	750
M83446/06-51	6551	M83446/06-90	6590	0.010 ±10%	150	32	40	1700	.10	750
M83446/06-52	6552	M83446/06-91	6591	0.012 ±10%	150	32	40	1500	.10	750
M83446/06-53	6553	M83446/06-92	6592	0.015 ±10%	150	29	37	1300	.10	750
M83446/06-54	6554	M83446/06-93	6593	0.018 ±10%	150	29	37	1100	.10	750
M83446/06-55	6555	M83446/06-94	6594	0.022 ±10%	100	35	43	900	.10	750
M83446/06-56	6556	M83446/06-95	6595	0.027 ±10%	100	34	42	900	.10	750
M83446/06-57	6557	M83446/06-96	6596	0.033 ±10%	100	32	41	800	.10	600
M83446/06-58	6558	M83446/06-97	6597	0.039 ±10%	100	32	41	750	.10	550
M83446/06-59	6559	M83446/06-98	6598	0.047 ±10%	100	32	41	750	.10	500
M83446/06-60	6560	M83446/06-99	6599	0.056 ±10%	100	32	41	700	.10	450
M83446/06-61	6561	M83446/06-100	6600	0.068 ±10%	100	32	41	700	.12	400
M83446/06-62	6562	M83446/06-101	6601	0.082 ±10%	100	32	40	700	.13	350
M83446/06-63	6563	M83446/06-102	6602	0.10 ±10%	50	32	40	600	.14	350
M83446/06-64	6564	M83446/06-103	6603	0.12 ±10%	50	32	40	500	.17	350
M83446/06-65	6565	M83446/06-104	6604	0.15 ±10%	50	32	40	500	.18	350
M83446/06-66	6566	M83446/06-105	6605	0.18 ±10%	50	32	40	450	.25	300
M83446/06-67	6567	M83446/06-106	6606	0.22 ±10%	50	32	40	400	.30	300
M83446/06-68	6568	M83446/06-107	6607	0.27 ±10%	50	30	39	330	.40	300
M83446/06-69	6569	M83446/06-108	6608	0.33 ±10%	50	30	39	270	.50	300
M83446/06-70	6570	M83446/06-109	6609	0.39 ±10%	50	24	31	250	.90	250
M83446/06-71	6571	M83446/06-110	6610	0.47 ±10%	25	24	31	200	.90	250
M83446/06-72	6572	M83446/06-111	6611	0.56 ±10%	25	24	31	180	1.10	250
M83446/06-73	6573	M83446/06-112	6612	0.68 ±10%	25	24	31	150	1.20	250
M83446/06-74	6574	M83446/06-113	6613	0.82 ±10%	25	24	31	130	1.40	250
M83446/06-75	6575	M83446/06-114	6614	1.0 ±10%	25	24	31	110	1.40	250
M83446/06-76	6576	M83446/06-115	6615	1.2 ±10%	7.9	21	28	110	1.50	200
M83446/06-77	6577	M83446/06-116	6616	1.5 ±10%	7.9	21	28	110	1.50	200
M83446/06-78	6578	M83446/06-117	6617	1.8 ±10%	7.9	21	28	100	1.60	200
M83446/06-79	6579	M83446/06-118	6618	2.2 ±10%	7.9	21	28	90	1.60	150
M83446/06-80	6580	M83446/06-119	6619	2.7 ±10%	7.9	21	28	80	1.60	150
M83446/06-81	6581	M83446/06-120	6620	3.3 ±10%	7.9	21	28	75	1.60	150
M83446/06-82	6582	M83446/06-121	6621	3.9 ±10%	7.9	21	28	70	2.90	100
M83446/06-83	6583	M83446/06-122	6622	4.7 ±10%	7.9	21	28	63	2.90	100
M83446/06-84	6584	M83446/06-123	6623	5.6 ±10%	7.9	21	28	60	3.00	100
M83446/06-85	6585	M83446/06-124	6624	6.8 ±10%	7.9	21	28	50	3.75	100
M83446/06-86	6586	M83446/06-125	6625	8.2 ±10%	7.9	21	28	40	4.50	100
M83446/06-87	6587	M83446/06-126	6626	10.0 ±10%	7.9	21	28	30	5.60	100