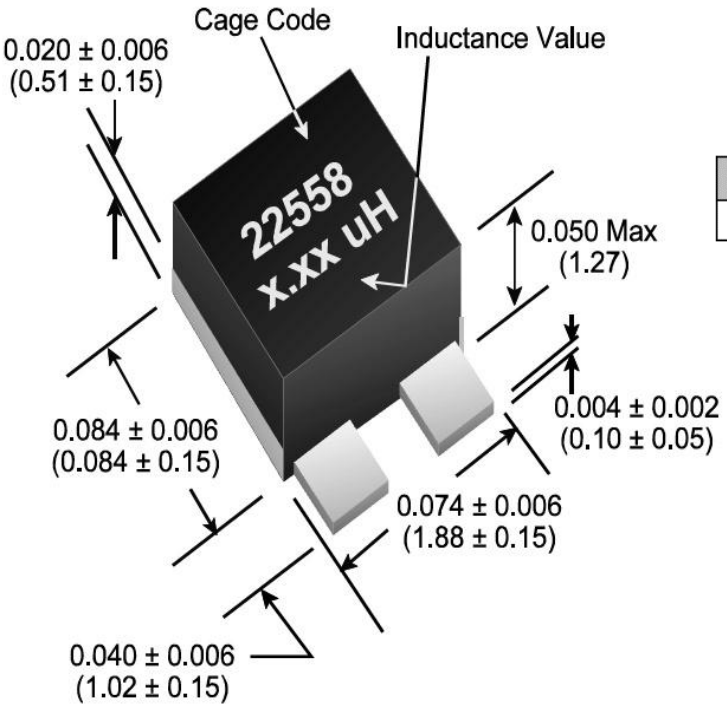
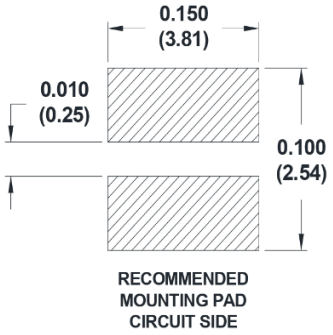
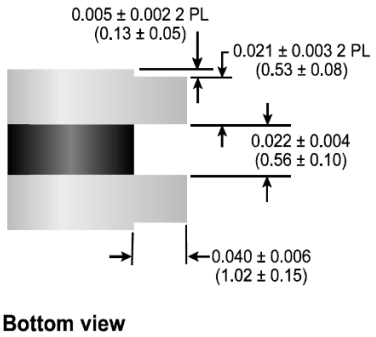
Fixed Chip Inductors – S6500 Series



Inches
(Millimeters)

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





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
- **Temperature rise (at 90°C):** 35°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
- 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): 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

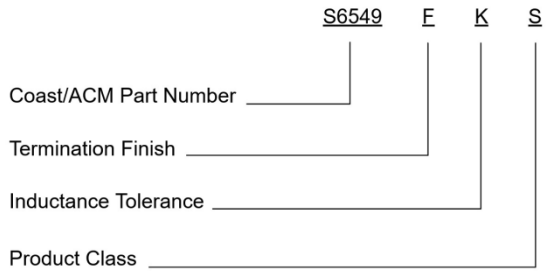
APPLICATIONS

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 – S6500 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							
M83446/06-49	S6549	M83446/06-88	S6588	0.005 ±10%	200	32	40	1900	.10	750
M83446/06-50	S6550	M83446/06-89	S6589	0.008 ±10%	200	32	40	1800	.10	750
M83446/06-51	S6551	M83446/06-90	S6590	0.010 ±10%	150	32	40	1700	.10	750
M83446/06-52	S6552	M83446/06-91	S6591	0.012 ±10%	150	32	40	1500	.10	750
M83446/06-53	S6553	M83446/06-92	S6592	0.015 ±10%	150	29	37	1300	.10	750
M83446/06-54	S6554	M83446/06-93	S6593	0.018 ±10%	150	29	37	1100	.10	750
M83446/06-55	S6555	M83446/06-94	S6594	0.022 ±10%	100	35	43	900	.10	750
M83446/06-56	S6556	M83446/06-95	S6595	0.027 ±10%	100	34	42	900	.10	750
M83446/06-57	S6557	M83446/06-96	S6596	0.033 ±10%	100	32	41	800	.10	600
M83446/06-58	S6558	M83446/06-97	S6597	0.039 ±10%	100	32	41	750	.10	550
M83446/06-59	S6559	M83446/06-98	S6598	0.047 ±10%	100	32	41	750	.10	500
M83446/06-60	S6560	M83446/06-99	S6599	0.056 ±10%	100	32	41	700	.10	450
M83446/06-61	S6561	M83446/06-100	S6600	0.068 ±10%	100	32	41	700	.12	400
M83446/06-62	S6562	M83446/06-101	S6601	0.082 ±10%	100	32	40	700	.13	350
M83446/06-63	S6563	M83446/06-102	S6602	0.10 ±10%	50	32	40	600	.14	350
M83446/06-64	S6564	M83446/06-103	S6603	0.12 ±10%	50	32	40	500	.17	350
M83446/06-65	S6565	M83446/06-104	S6604	0.15 ±10%	50	32	40	500	.18	350
M83446/06-66	S6566	M83446/06-105	S6605	0.18 ±10%	50	32	40	450	.25	300
M83446/06-67	S6567	M83446/06-106	S6606	0.22 ±10%	50	32	40	400	.30	300
M83446/06-68	S6568	M83446/06-107	S6607	0.27 ±10%	50	30	39	330	.40	300
M83446/06-69	S6569	M83446/06-108	S6608	0.33 ±10%	50	30	39	270	.50	300
M83446/06-70	S6570	M83446/06-109	S6609	0.39 ±10%	50	24	31	250	.90	250
M83446/06-71	S6571	M83446/06-110	S6610	0.47 ±10%	25	24	31	200	.90	250
M83446/06-72	S6572	M83446/06-111	S6611	0.56 ±10%	25	24	31	180	1.10	250
M83446/06-73	S6573	M83446/06-112	S6612	0.68 ±10%	25	24	31	150	1.20	250
M83446/06-74	S6574	M83446/06-113	S6613	0.82 ±10%	25	24	31	130	1.40	250
M83446/06-75	S6575	M83446/06-114	S6614	1.0 ±10%	25	24	31	110	1.40	250
M83446/06-76	S6576	M83446/06-115	S6615	1.2 ±10%	7.9	21	28	110	1.50	200
M83446/06-77	S6577	M83446/06-116	S6616	1.5 ±10%	7.9	21	28	110	1.50	200
M83446/06-78	S6578	M83446/06-117	S6617	1.8 ±10%	7.9	21	28	100	1.60	200
M83446/06-79	S6579	M83446/06-118	S6618	2.2 ±10%	7.9	21	28	90	1.60	150
M83446/06-80	S6580	M83446/06-119	S6619	2.7 ±10%	7.9	21	28	80	1.60	150
M83446/06-81	S6581	M83446/06-120	S6620	3.3 ±10%	7.9	21	28	75	1.60	150
M83446/06-82	S6582	M83446/06-121	S6621	3.9 ±10%	7.9	21	28	70	2.90	100
M83446/06-83	S6583	M83446/06-122	S6622	4.7 ±10%	7.9	21	28	63	2.90	100
M83446/06-84	S6584	M83446/06-123	S6623	5.6 ±10%	7.9	21	28	60	3.00	100
M83446/06-85	S6585	M83446/06-124	S6624	6.8 ±10%	7.9	21	28	50	3.75	100
M83446/06-86	S6586	M83446/06-125	S6625	8.2 ±10%	7.9	21	28	40	4.50	100
M83446/06-87	S6587	M83446/06-126	S6626	10.0 ±10%	7.9	21	28	30	5.60	100