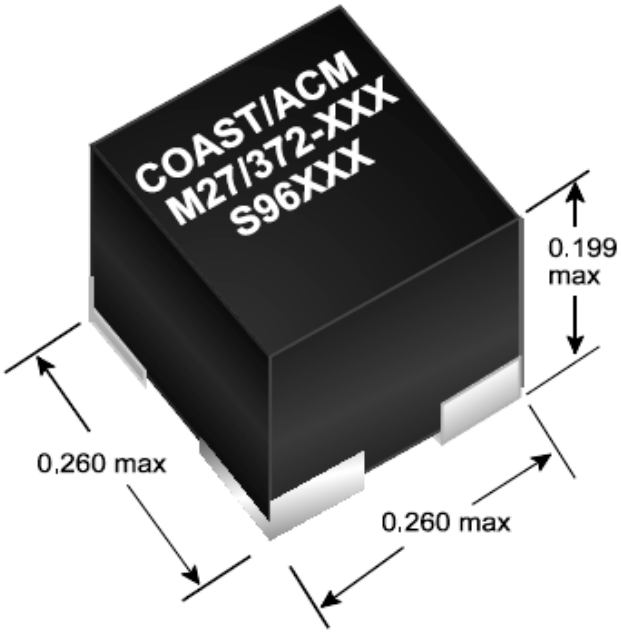
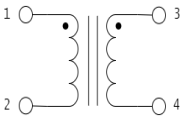
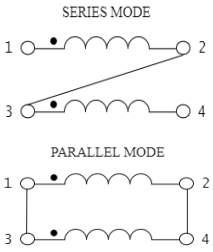
Power Inductors – S96000F Series





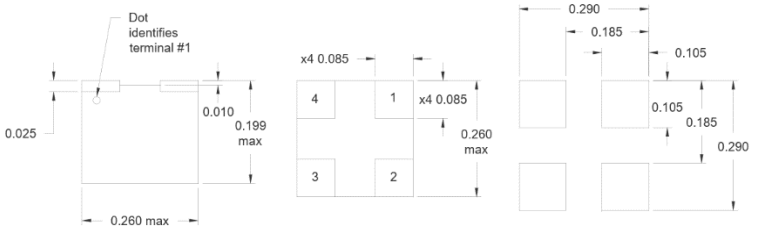
BACK-SIDE VIEW





IN	MM
0.290	7.37
0.260	6.60
0.199	5.05
0.185	4.70
0.105	2.67
0.085	2.16
0.025	0.64
0.010	0.25

MIL-STD-981
MIL-PRF-27



SPECIFICATIONS

- **Inductance:** 0.08 µH to 100 µH (Series)
  0.02 µH to 25 µH (Parallel)
- **Standard Tolerance:** ±10%
- **Operating Temperature:** -55°C to +125°C
- **Storage Temperature:** -60°C to +130°C
- **Temperature rise (at 90°C):** 35°C
- **Terminal Solderability:** MIL-STD-202, Method 208
- **Inductance measured at** 0.1 Vrms, 10 kHz, 0 DC current
- **Insulation Resistance**: MIL-STD-202, Method 302, 1000 megohms minimum at 100 Vdc
- **Terminal Strength**: MIL-STD-202, Method 211, test condition A, 2 lbs
- **Standard Termination Finish:** Tin-lead
- **Weight:** 35.4 gram, maximum
- **Dielectric Withstanding Voltage:** Method 301 of MIL-STD-202, 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

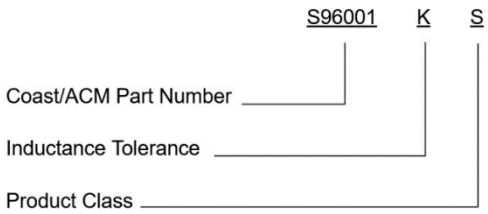
- Transfer Molded Package
- Marking: Laser or Ink
- Leadless device for minimum footprint
- Internal Welded Terminations
- Low EMI Radiation
- Low Thermal Expansion permits mounting on most substrate materials
- Outgassing meets NASA spec SP-R-0022A: TML < 1%
- Tape and Reel Packaging available (additional charge)
  Full Reel Quantity (Small): 300 pieces
  Full Reel Quantity (Large): 1000 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-27/372 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



K: Inductance Tolerance
M: ±20% K: ±12% J: ±5%

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

Power Inductors – S96000F Series

Dash Number	C/ ACM P/N	Series			Parallel		
		Inductance (µH) ±12 percent	Rated DC Current (mA)	DC Resistance Max (Ω)	Inductance (µH) ±12 percent	Rated DC Current (mA)	DC Resistance Max (Ω)
MIL-PRF-27/372-073	S96073	.08	3300	0.020	.020	6600	00.005
MIL-PRF-27/372-074	S96074	.14	2800	0.024	.035	5600	.006
MIL-PRF-27/372-075	S96075	.22	2400	0.036	.055	4600	0.009
MIL-PRF-27/372-076	S96076	.44	1800	0.056	.110	3600	0.014
MIL-PRF-27/372-077	S96077	.56	1500	0.072	.140	3000	0.018
MIL-PRF-27/372-078	S96078	.60	2300	0.036	.150	4600	0.009
MIL-PRF-27/372-079	S96079	.86	1900	0.048	.215	3800	0.012
MIL-PRF-27/372-080	S96080	1.30	1900	0.048	.340	3800	0.012
MIL-PRF-27/372-081	S96081	1.86	1800	0.052	.465	3600	0.013
MIL-PRF-27/372-082	S96082	2.44	1700	0.060	.610	3400	0.015
MIL-PRF-27/372-083	S96083	3.46	1500	0.064	.865	3000	0.016
MIL-PRF-27/372-084	S96084	4.40	1200	0.080	1.10	2400	0.020
MIL-PRF-27/372-085	S96085	5.40	1000	0.120	1.35	2000	0.030
MIL-PRF-27/372-086	S96086	7.80	950	0.160	1.95	1900	0.040
MIL-PRF-27/372-087	S96087	10.60	850	0.240	2.65	1700	0.060
MIL-PRF-27/372-088	S96088	12.16	800	0.260	3.04	1600	0.065
MIL-PRF-27/372-089	S96089	13.80	750	0.280	3.45	1500	0.070
MIL-PRF-27/372-090	S96090	17.48	650	0.360	4.37	1300	0.090
MIL-PRF-27/372-091	S96091	19.52	600	0.400	4.88	1200	0.100
MIL-PRF-27/372-092	S96092	10.60	550	0.500	5.40	1100	0.125
MIL-PRF-27/372-093	S96093	26.20	500	0.560	6.55	1000	0.140
MIL-PRF-27/372-094	S96094	31.20	450	0.600	7.80	900	0.150
MIL-PRF-27/372-095	S96095	48.60	400	0.900	12.15	800	0.225
MIL-PRF-27/372-096	S96096	58.80	350	1.30	14.70	700	0.325
MIL-PRF-27/372-097	S96097	78.00	300	1.52	19.50	600	0.380
MIL-PRF-27/372-098	S96098	90.80	280	2.20	22.70	560	0.550
MIL-PRF-27/372-099	S96099	100	250	2.40	25.00	500	0.600