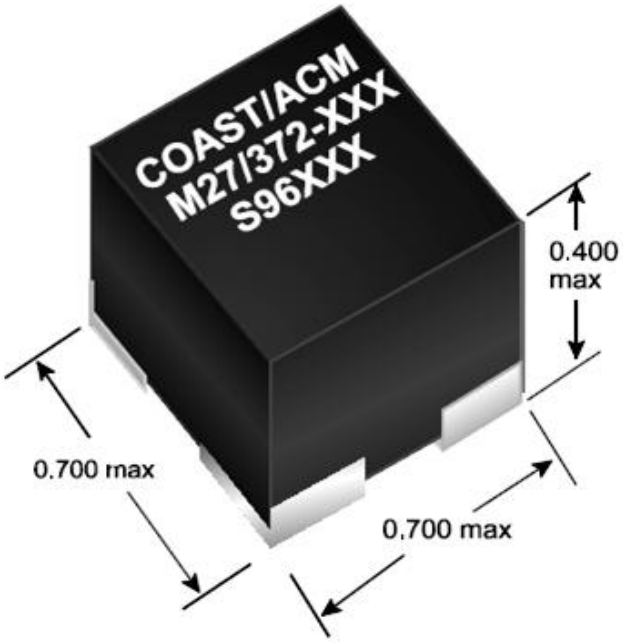
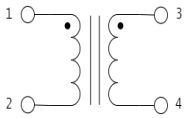
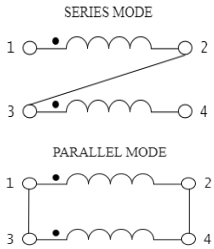
Power Inductors – S96000E Series





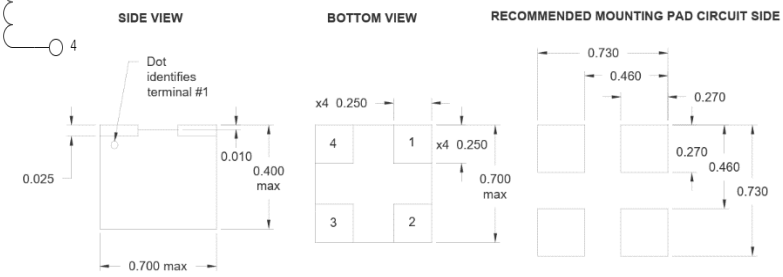
BACK-SIDE VIEW





IN	MM
0.730	18.54
0.700	17.78
0.460	11.68
0.400	10.16
0.270	6.86
0.250	6.35
0.025	0.64
0.010	0.25

MIL-STD-981
MIL-PRF-27



SPECIFICATIONS

- **Inductance:** 11 µH to 10,000 µH (Series)
  2.75 µH to 2,500 µH (Series (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: 150 pieces
- Custom Designs: Other electrical configurations and performance characteristics are available in various sizes and package type

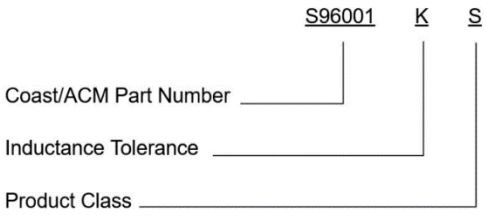
APPLICATIONS

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 – S96000E 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-27/372-041	S96041	11	4800	0.024	2.76	9600	0.006
MIL-PRF-27/372-042	S96042	18	3700	0.036	4.50	7400	0.009
MIL-PRF-27/372-043	S96043	27	3000	0.052	6.75	6000	0.013
MIL-PRF-27/372-044	S96044	38	2500	0.076	9.50	5000	0.019
MIL-PRF-27/372-045	S96045	44	2400	0.084	11	4800	0.021
MIL-PRF-27/372-046	S96046	100	1600	0.20	25	3200	0.050
MIL-PRF-27/372-047	S96047	200	1100	0.46	50	2200	0.115
MIL-PRF-27/372-048	S96048	400	800	0.84	100	1600	0.210
MIL-PRF-27/372-049	S96049	500	710	1.16	125	1420	0.290
MIL-PRF-27/372-050	S96050	760	670	1.76	167.60	1140	0.440
MIL-PRF-27/372-051	S96051	1000	500	2.00	250	1000	0.500
MIL-PRF-27/372-052	S96052	2000	350	4.32	500	700	1.075
MIL-PRF-27/372-053	S96053	3000	290	6.64	750	580	1.660
MIL-PRF-27/372-054	S96054	4000	250	7.68	1000	500	1.920
MIL-PRF-27/372-055	S96055	7500	180	16.20	1875	360	4.050
MIL-PRF-27/372-056	S96056	10,000	150	18.80	2500	300	4.070
MIL-PRF-27/372-057	S96057	11	6000	0.020	2.75	12,000	0.005
MIL-PRF-27/372-058	S96058	18	4600	0.032	4.50	9200	0.008
MIL-PRF-27/372-059	S96059	27	3700	0.044	6.75	7400	0.011
MIL-PRF-27/372-060	S96060	38	3100	0.064	9.50	6200	0.016
MIL-PRF-27/372-061	S96061	44	3000	0.068	11	6000	0.017
MIL-PRF-27/372-062	S96062	100	2000	0.152	25	4000	0.038
MIL-PRF-27/372-063	S96063	200	1300	0.340	50	2600	0.085
MIL-PRF-27/372-064	S96064	400	890	0.600	100	1780	0.150
MIL-PRF-27/372-065	S96065	500	800	0.848	125	1600	0.212
MIL-PRF-27/372-066	S96066	750	700	1.32	187.50	1400	0.330
MIL-PRF-27/372-067	S96067	1000	600	1.52	250	1200	0.380
MIL-PRF-27/372-068	S96068	2000	430	3.40	500	860	0.850
MIL-PRF-27/372-069	S96069	3000	360	5.20	750	720	1.300
MIL-PRF-27/372-070	S96070	4000	310	6.08	1000	620	1.520
MIL-PRF-27/372-071	S96071	7500	220	13.20	1875	440	3.300
MIL-PRF-27/372-072	S96072	10,000	180	15.20	2500	360	3.800