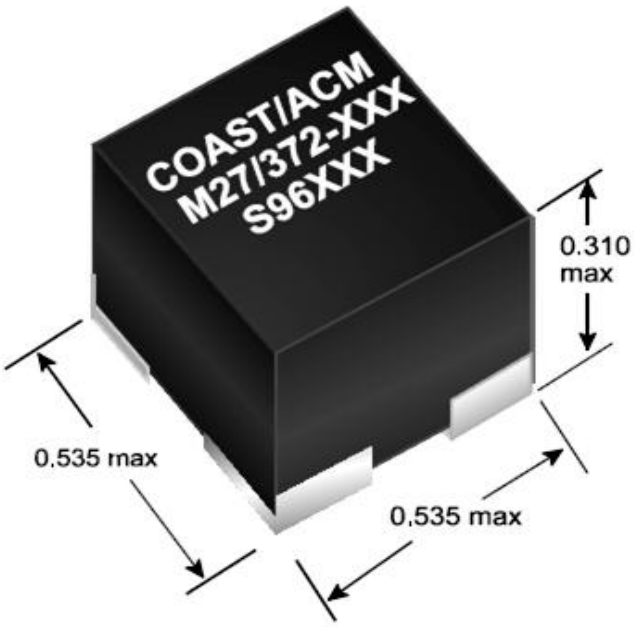
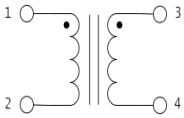
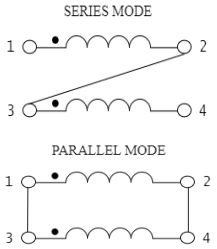
Power Inductors – S96000D Series





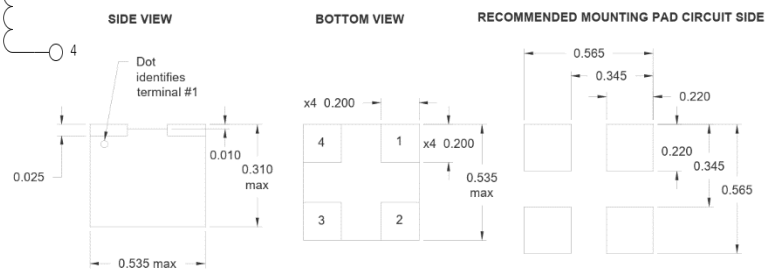
BACK-SIDE VIEW





IN	MM
0.565	14.35
0.535	13.59
0.345	8.76
0.310	7.87
0.220	5.59
0.200	5.08
0.025	0.64
0.010	0.25

MIL-STD-981
MIL-PRF-27



SPECIFICATIONS

- **Inductance:** 0.1 mH to 10 mH (Series)
  0.025 mH to 2.5 mH (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): 125 pieces
  Full Reel Quantity (Large): 300 pieces
- Custom Designs: Other electrical configurations and performance characteristics are available in various sizes and package type

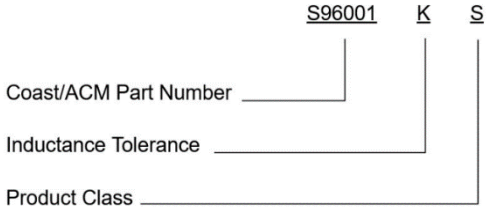
APPLICATIONS

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: ±10% J: ±5%

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

Power Inductors – S96000D Series

Dash Number	C/ACM P/N	Series			Parallel			Power Rating (mW)
		Inductance (mH) ±10 percent	Rated DC Current (mA)	DC Resistance Max (Ω)	Inductance (mH) ±10 percent	Rated DC Current (mA)	DC Resistance Max (Ω)	
MIL-PRF-27/372-004	S96004	0.100	1350	0.21	0.025	2700	0.053	450
MIL-PRF-27/372-008	S96008	0.250	930	0.41	0.062	1860	0.103	450
MIL-PRF-27/372-012	S96012	0.500	660	0.82	0.125	1320	0.205	450
MIL-PRF-27/372-016	S96016	0.750	540	1.25	0.187	1080	0.313	450
MIL-PRF-27/372-020	S96020	1.000	470	1.87	0.250	940	0.468	450
MIL-PRF-27/372-024	S96024	2.000	330	3.62	0.500	660	0.910	450
MIL-PRF-27/372-028	S96028	3.000	270	5.50	0.750	540	1.380	450
MIL-PRF-27/372-032	S96032	5.000	210	9.12	1.250	420	2.280	450
MIL-PRF-27/372-036	S96036	7.500	170	13.75	1.875	340	3.440	450
MIL-PRF-27/372-040	S96040	10.000	140	18.25	2.500	280	4.570	450