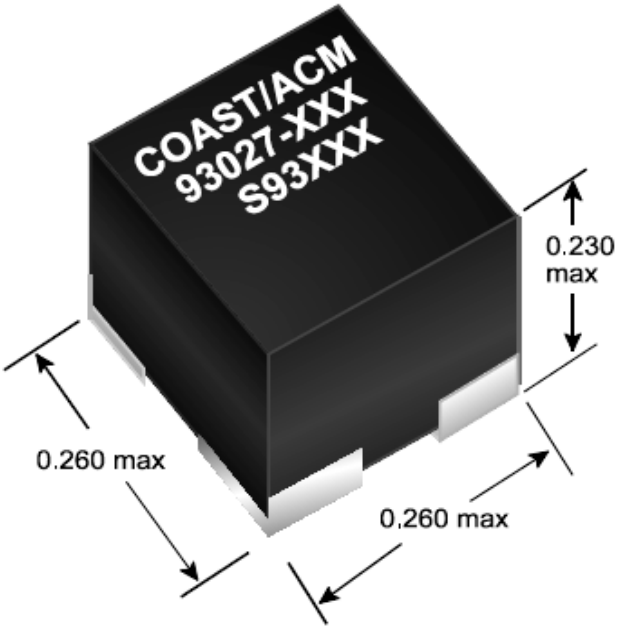
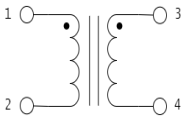
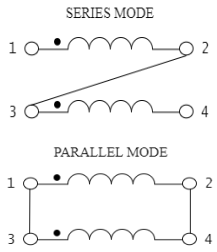
Power Inductors – S93000A Series





BACK-SIDE VIEW

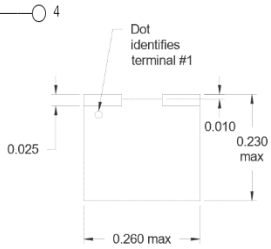




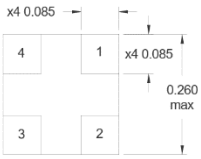
IN	MM
0.290	7.37
0.260	6.60
0.230	5.84
0.185	4.70
0.105	2.67
0.085	2.16
0.025	0.64
0.010	0.25

MIL-STD-981
MIL-PRF-27

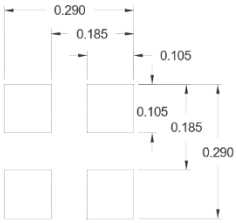
SIDE VIEW



BOTTOM VIEW



RECOMMENDED MOUNTING PAD CIRCUIT SIDE



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:** 34.5 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

APPLICATIONS

These components meet the requirements of MIL-PRF-27 and MIL-STD-981,Class S or Class B classifications:

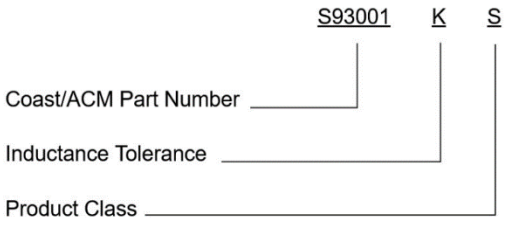
- **Class S:** Specifically engineered for critical flight operations and essential ground support missions, as well as any application where safety is critical. These components undergo a stringent quality validation process, which includes both Group A and Group B screening as per the requirements 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.

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%
- Termination Finish Options available (additional charge)
- Tighter Tolerances available (additional charge)
- 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

PART IDENTIFYING NUMBER



K: Inductance Tolerance
M: ±20% K: ±10% J: ±5%

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

Power Inductors – S93000A 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)	
93027-001	S93001	0.100	300	1.60	0.025	600	0.400	125
93027-005	S93005	0.250	200	3.11	0.062	400	0.778	125
93027-009	S93009	0.500	150	6.14	0.125	300	1.535	125
93027-013	S93013	0.750	120	9.45	0.187	240	2.363	125
93027-017	S93017	1.000	95	12.85	0.250	190	3.213	125
93027-021	S93021	2.000	75	25.60	0.500	150	6.400	125
93027-025	S93025	3.000	60	38.40	0.750	120	9.600	125
93027-029	S93029	5.000	45	64.00	1.250	90	16.000	125
93027-033	S93033	7.500	30	96.00	1.875	60	24.000	125
93027-037	S93037	10.000	20	128.00	2.500	40	32.000	125