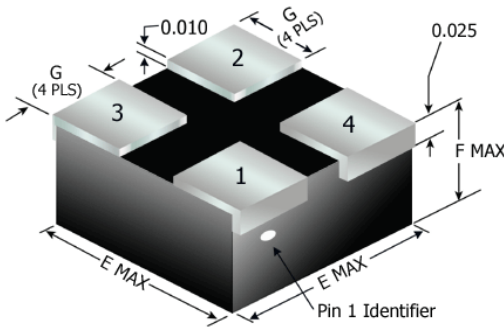


# S96000 Series

# MIL-STD-981, MIL-PRF-27/372

## Power Inductors

## QPL Approved

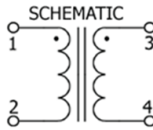


Marking (on top of the case)

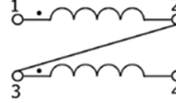
M27/372-(Dash Number)

22558

S96xxx



SERIES MODE



PARALLEL MODE

Physical Parameters				Tape & Reel (additional charge)	
Size	E Max.	F Max.	G <sup>(1)</sup>	Small Reel (Qty)	Large Reel (Qty)
A	0.260 (6.60)	0.230 (5.84)	0.085 (2.16)	300	1000
B	0.410 (10.41)	0.230 (5.84)	0.135 (3.43)	200	650
C	0.410 (10.41)	0.310 (7.87)	0.135 (3.43)	200	650
D	0.535 (13.59)	0.310 (7.87)	0.200 (5.08)	125	300
E	.700 (17.78)	.400 (10.16)	.250 (6.35)	150	
F	.260 (6.60)	0.199 (5.05)	0.085 (2.16)	300	1000

ALL DIMENSIONS ARE IN INCHES, ( ) MM. <sup>(1)</sup>TOLERANCE FOR ALL DIMENSIONS ±0.010 INCH (0.25MM)

### FEATURES

- Leadless device for minimum footprint
- Lead Pad Coplanarity Max: 0.002 inches; 0.05 mm
- Low EMI Radiation
- Low Thermal Expansion permits mounting on most substrate materials
- Custom Designs: Other electrical configurations and performance characteristics are available in various sizes and package types

### SPECIFICATIONS

- Case: Grade 5, encapsulated
  - Terminals: tin-lead plated phosphor bronze
  - Weight: 1.25 ounces, maximum
  - Altitude: 70,000 feet, maximum
  - Operating temperature range: -55°C to 125°C
  - Insulation Resistance: MIL-STD-202, method 302, 1,000 megohms minimum at 100 V dc
  - Terminal strength: MIL-STD-202, method 211, test condition A, 2 lbs
  - Dielectric withstanding voltage (at sea level): 200 volts rms
  - Temperature rise 35°C max over ambient temperature of 90°C
  - Terminals meet solderability per MIL-STD-202, Method 208
  - Inductance measured at 0.1 Vrms, 10 kHz, 0 DC current
  - Outgassing meets NASA spec SP-R-0022A: TML < 1%
  - Meets the requirements of MIL-PRF-27/372 and MIL-STD-981, class S or class B
- Class S parts are intended for critical flight and mission-essential ground support applications and any application that is critical to safety.
- Class B parts are for use in noncritical flight and non-mission-essential ground support applications.

Dash Number	C/ACM P/N	Series			Parallel			Size	Power Rating (mW)
		Inductance ±10 Percent (mH)	Rated DC Current (mA)	DC Resistance Max (Ω)	Inductance ±10 percent (mH)	Rated DC Current (mA)	DC Resistance Max (Ω)		
MIL-PRF-27/372-001	S96001	0.100	300	1.60	0.025	600	0.400	A	125
MIL-PRF-27/372-002	S96002	0.100	600	0.96	0.025	1200	0.240	B	250
MIL-PRF-27/372-003	S96003	0.100	780	0.37	0.025	1560	0.093	C	300
MIL-PRF-27/372-004	S96004	0.100	1350	0.21	0.025	2700	0.053	D	450
MIL-PRF-27/372-005	S96005	0.250	200	3.11	0.062	400	0.778	A	125
MIL-PRF-27/372-006	S96006	0.250	400	1.98	0.062	800	0.495	B	250
MIL-PRF-27/372-007	S96007	0.250	530	0.82	0.062	1060	0.205	C	300
MIL-PRF-27/372-008	S96008	0.250	930	0.41	0.062	1860	0.103	D	450
MIL-PRF-27/372-009	S96009	0.500	150	6.14	0.125	300	1.535	A	125
MIL-PRF-27/372-010	S96010	0.500	300	3.35	0.125	600	0.838	B	250
MIL-PRF-27/372-011	S96011	0.500	380	1.62	0.125	760	0.405	C	300
MIL-PRF-27/372-012	S96012	0.500	660	0.82	0.125	1320	0.205	D	450
MIL-PRF-27/372-013	S96013	0.750	120	9.45	0.187	240	2.363	A	125
MIL-PRF-27/372-014	S96014	0.750	250	5.20	0.187	500	1.300	B	250
MIL-PRF-27/372-015	S96015	0.750	310	2.50	0.187	620	0.625	C	300
MIL-PRF-27/372-016	S96016	0.750	540	1.25	0.187	1080	0.313	D	450
MIL-PRF-27/372-017	S96017	1.000	95	12.85	0.250	190	3.213	A	125
MIL-PRF-27/372-018	S96018	1.000	200	6.90	0.250	400	1.725	B	250
MIL-PRF-27/372-019	S96019	1.000	270	3.37	0.250	540	0.843	C	300
MIL-PRF-27/372-020	S96020	1.000	470	1.87	0.250	940	0.468	D	450
MIL-PRF-27/372-021	S96021	2.000	75	25.60	0.500	150	6.400	A	125
MIL-PRF-27/372-022	S96022	2.000	150	12.20	0.500	300	3.050	B	250
MIL-PRF-27/372-023	S96023	2.000	190	6.75	0.500	380	1.690	C	300
MIL-PRF-27/372-024	S96024	2.000	330	3.62	0.500	660	0.910	D	450
MIL-PRF-27/372-025	S96025	3.000	60	38.40	0.750	120	9.600	A	125
MIL-PRF-27/372-026	S96026	3.000	120	18.30	0.750	240	4.580	B	250
MIL-PRF-27/372-027	S96027	3.000	160	10.12	0.750	320	2.530	C	300
MIL-PRF-27/372-028	S96028	3.000	270	5.50	0.750	540	1.380	D	450
MIL-PRF-27/372-029	S96029	5.000	45	64.00	1.250	90	16.000	A	125
MIL-PRF-27/372-030	S96030	5.000	90	30.40	1.250	180	7.600	B	250
MIL-PRF-27/372-031	S96031	5.000	120	16.87	1.250	240	4.220	C	300
MIL-PRF-27/372-032	S96032	5.000	210	9.12	1.250	420	2.280	D	450
MIL-PRF-27/372-033	S96033	7.500	30	96.00	1.875	60	24.000	A	125
MIL-PRF-27/372-034	S96034	7.500	70	46.00	1.875	140	11.500	B	250
MIL-PRF-27/372-035	S96035	7.500	100	25.37	1.875	200	6.350	C	300
MIL-PRF-27/372-036	S96036	7.500	170	13.75	1.875	340	3.440	D	450
MIL-PRF-27/372-037	S96037	10.000	20	128.00	2.500	40	32.000	A	125
MIL-PRF-27/372-038	S96038	10.000	50	61.00	2.500	100	15.250	B	250
MIL-PRF-27/372-039	S96039	10.000	80	33.75	2.500	160	8.440	C	300
MIL-PRF-27/372-040	S96040	10.000	140	18.25	2.500	280	4.570	D	450

#### Part or Identifying Number (PIN):

S96xxxS: MIL-STD-981, Class S

S96xxxB: MIL-STD-981, Class B



Coast / Advanced Chip Magnetics

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Web: www.coastacm.com · Email: sales@coastacm.com

Dash Number	C/ACM P/N	Series			Parallel			Size
		Inductance ±12 percent (μH)	Rated DC Current (mA)	DC Resistance Max (Ω)	Inductance ±12 percent (μH)	Rated DC Current (mA)	DC Resistance Max (Ω)	
MIL-PRF-27/372-041	S96041	11	4800	.024	2.76	9600	.006	E
MIL-PRF-27/372-042	S96042	18	3700	.036	4.50	7400	.009	E
MIL-PRF-27/372-043	S96043	27	3000	.052	6.75	6000	.013	E
MIL-PRF-27/372-044	S96044	38	2500	.076	9.50	5000	.019	E
MIL-PRF-27/372-045	S96045	44	2400	.084	11.00	4800	.021	E
MIL-PRF-27/372-046	S96046	100	1600	.20	25.00	3200	.050	E
MIL-PRF-27/372-047	S96047	200	1100	.46	50.00	2200	.115	E
MIL-PRF-27/372-048	S96048	400	800	.84	100.00	1600	.210	E
MIL-PRF-27/372-049	S96049	500	710	1.16	125.00	1420	.290	E
MIL-PRF-27/372-050	S96050	760	670	1.76	167.60	1140	.440	E
MIL-PRF-27/372-051	S96051	1000	500	2.00	250.00	1000	.500	E
MIL-PRF-27/372-052	S96052	2000	350	4.32	500.00	700	1.075	E
MIL-PRF-27/372-053	S96053	3000	290	6.64	750.00	580	1.660	E
MIL-PRF-27/372-054	S96054	4000	250	7.68	1000.00	500	1.920	E
MIL-PRF-27/372-055	S96055	7500	180	16.20	1875.00	360	4.050	E
MIL-PRF-27/372-056	S96056	10,000	150	18.80	2500.00	300	4.070	E
MIL-PRF-27/372-057	S96057	11	6000	.020	2.75	12,000	.005	E
MIL-PRF-27/372-058	S96058	18	4600	.032	4.50	9200	.008	E
MIL-PRF-27/372-059	S96059	27	3700	.044	6.75	7400	.011	E
MIL-PRF-27/372-060	S96060	38	3100	.064	9.50	6200	.016	E
MIL-PRF-27/372-061	S96061	44	3000	.068	11.00	6000	.017	E
MIL-PRF-27/372-062	S96062	100	2000	.152	25.00	4000	.038	E
MIL-PRF-27/372-063	S96063	200	1300	.340	50.00	2600	.085	E
MIL-PRF-27/372-064	S96064	400	890	.600	100.00	1780	.150	E
MIL-PRF-27/372-065	S96065	500	800	.848	125.00	1600	.212	E
MIL-PRF-27/372-066	S96066	750	700	1.32	187.50	1400	.330	E
MIL-PRF-27/372-067	S96067	1000	600	1.52	250.00	1200	.380	E
MIL-PRF-27/372-068	S96068	2000	430	3.40	500.00	860	.850	E
MIL-PRF-27/372-069	S96069	3000	360	5.20	750.00	720	1.300	E
MIL-PRF-27/372-070	S96070	4000	310	6.08	1000.00	620	1.520	E
MIL-PRF-27/372-071	S96071	7500	220	13.20	1875.00	440	3.300	E
MIL-PRF-27/372-072	S96072	10,000	180	15.20	2500.00	360	3.800	E
MIL-PRF-27/372-073	S96073	.08	3300	.020	.020	6600	.005	E
MIL-PRF-27/372-074	S96074	.14	2800	.024	.035	5600	.006	E
MIL-PRF-27/372-075	S96075	.22	2400	.036	.055	4600	.009	E
MIL-PRF-27/372-076	S96076	.44	1800	.056	.110	3600	.014	E
MIL-PRF-27/372-077	S96077	.56	1500	.072	.140	3000	.018	E
MIL-PRF-27/372-078	S96078	.60	2300	.036	.150	4600	.009	E
MIL-PRF-27/372-079	S96079	.86	1900	.048	.215	3800	.012	E
MIL-PRF-27/372-080	S96080	1.30	1900	.048	.340	3800	.012	E
MIL-PRF-27/372-081	S96081	1.86	1800	.052	.465	3600	.013	F
MIL-PRF-27/372-082	S96082	2.44	1700	.060	.610	3400	.015	F
MIL-PRF-27/372-083	S96083	3.46	1500	.064	.865	3000	.016	F
MIL-PRF-27/372-084	S96084	4.40	1200	.080	1.10	2400	.020	F
MIL-PRF-27/372-085	S96085	5.40	100	.120	1.35	2000	.030	F
MIL-PRF-27/372-086	S96086	7.80	950	.160	1.95	1900	.040	F
MIL-PRF-27/372-087	S96087	10.60	850	.240	2.65	1700	.060	F
MIL-PRF-27/372-088	S96088	12.16	800	.260	3.04	1600	.065	F
MIL-PRF-27/372-089	S96089	13.80	750	.280	3.45	1500	.070	F
MIL-PRF-27/372-090	S96090	17.48	650	.360	4.37	1300	.090	F
MIL-PRF-27/372-091	S96091	19.52	600	.400	4.88	1200	.100	F
MIL-PRF-27/372-092	S96092	10.60	550	.500	5.40	1100	.125	F
MIL-PRF-27/372-093	S96093	26.20	500	.560	6.55	1000	.140	F
MIL-PRF-27/372-094	S96094	31.20	450	.600	7.80	900	.150	F
MIL-PRF-27/372-095	S96095	48.60	400	.900	12.15	800	.225	F
MIL-PRF-27/372-096	S96096	58.80	350	1.30	14.70	700	.325	F
MIL-PRF-27/372-097	S96097	78.00	300	1.52	19.50	600	.380	F
MIL-PRF-27/372-098	S96098	90.80	280	2.20	22.70	560	.550	F
MIL-PRF-27/372-099	S96099	100.00	250	2.40	25.00	500	.600	F



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