



S60000 SERIES

PACKAGE A0 REF: M27/372



ALL PARTS AVAILABLE AS CLASS S OR CLASS B

MIL-STD-981

ELECTRICAL SPECIFICATIONS

- **Operating Temperature:** -55°C to +130°C
- **Storage Temperature:** -60°C to +135°C
- **Temperature Rise @ 90°C:** < 35°C
- **Inductance at rated DC:** $\geq 70\%$
- **Dielectric Withstanding Voltage:** 100 V_{RMS}
- Thermally stable inductance within 2% over operating temperature range
- **Low Outgassing:** TML <1%
- **Different electrical values available upon request**

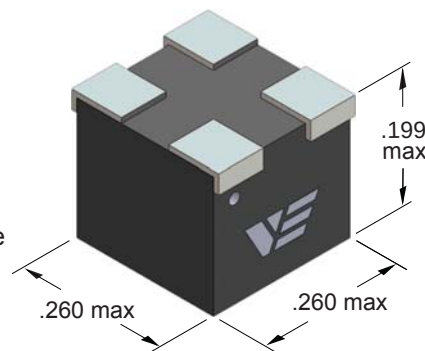
FEATURES

- **Compact**, low profile, ideal for automatic placement
- Built to meet **MIL-STD-981** specifications
- **Terminations:** Tin-lead
- **Welded Internal Connections**
- **Moisture, Shock and Immersion Resistant**
- **Magnetically Shielded**
- **Multiple Configurations:** series, parallel, transformer, dual inductor
- **Other termination finishes available**

APPLICATIONS

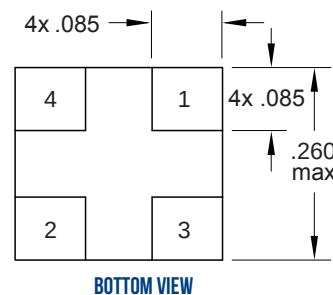
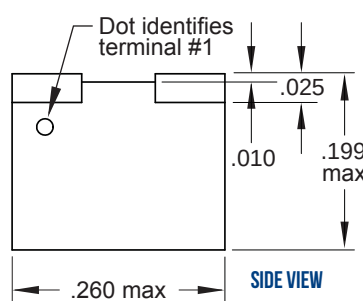
- Filter inductors
- Power supplies
- Ripple suppressors
- DC/DC converters
- Common mode chokes
- SEPIC converters
- Isolation transformers

Add "-S" suffix for Class S Screening
Add "-B" suffix for Class B Screening

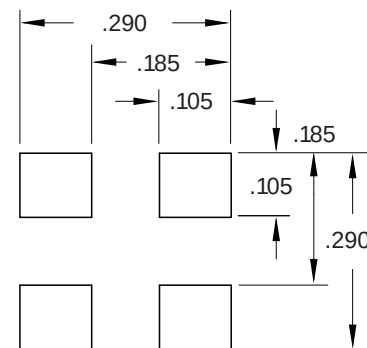


THRU-HOLE & GULL-WING PACKAGES ALSO AVAILABLE

MARKINGS: LASER ETCH OR INK

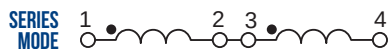


IN	MM
0.290	7.37
0.260	6.60
0.199	5.05
0.185	4.70
0.105	2.67
0.085	2.16
0.025	0.64
0.010	0.25

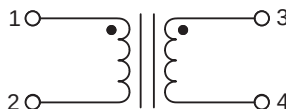


RECOMMENDED MOUNTING PAD CIRCUIT SIDE

TYPICAL USER CONNECTIONS



SCHEMATIC

**S60000 SERIES**
PACKAGE A0



DATA TABLE

Vanguard P/N	Series Inductance (uH $\pm 20\%$)	Series Rated DC Current (mA)	Series DCR max (Ohms)	Parallel Inductance (uH $\pm 20\%$)	Parallel Rated DC Current (mA)	Parallel DCR max (Ohms)	Package A-
S60073	0.08	3300	0.020	0.020	6600	0.005	0
S60074	0.14	2800	0.024	0.035	5600	0.006	0
S60075	0.22	2400	0.036	0.055	4800	0.009	0
S60076	0.44	1800	0.056	0.110	3600	0.014	0
S60077	0.56	1500	0.072	0.140	3000	0.018	0
S60078	0.60	2300	0.036	0.150	4600	0.009	0
S60079	0.86	1900	0.048	0.215	3800	0.012	0
S60080	1.36	1900	0.048	0.340	3800	0.012	0
S60081	1.86	1800	0.052	0.465	3600	0.013	0
S60082	2.44	1700	0.060	0.610	3400	0.015	0
S60083	3.46	1500	0.064	0.865	3000	0.016	0
S60084	4.40	1200	0.080	1.10	2400	0.020	0
S60085	5.40	1000	0.120	1.35	2000	0.030	0
S60086	7.80	950	0.160	1.95	1900	0.040	0
S60087	10.60	850	0.240	2.65	1700	0.060	0
S60088	12.16	800	0.260	3.04	1600	0.065	0
S60089	13.80	750	0.280	3.45	1500	0.070	0
S60090	17.48	650	0.360	4.37	1300	0.090	0
S60091	19.52	600	0.400	4.88	1200	0.100	0
S60092	21.60	550	0.500	5.40	1100	0.125	0
S60093	26.20	500	0.560	6.55	1000	0.140	0
S60094	31.20	450	0.600	7.80	900	0.150	0
S60095	48.60	400	0.900	12.15	800	0.225	0
S60096	58.80	350	1.30	14.70	700	0.325	0
S60097	78.00	300	1.52	19.50	600	0.380	0
S60098	90.80	280	2.20	22.70	560	0.550	0
S60099	100.00	250	2.40	25.00	500	0.600	0

S60086
thru
S60099
are
 $\pm 12\%$
toleranceInductance measured at 10 kHz, 0.1 V_{RMS}

CUSTOM DESIGNS & MODIFICATIONS:

Other electrical configurations and performance characteristics are available in various sizes and package types

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