



S60000 SERIES

PACKAGE A3 REF: M27/372



ALL PARTS AVAILABLE AS CLASS S OR CLASS B

MIL-STD-981

Inductance Range (mH)	DCR max (Ohms)	Current Rating (mA)
0.025 to 10.000	0.093 to 33.75	80 to 1560

ELECTRICAL SPECIFICATIONS

- **Operating Temperature:** -55°C to +130°C
- **Storage Temperature:** -60°C to +135°C
- **Temperature Rise @ 90°C:** < 30°C
- **Inductance at rated DC:** ≥ 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**

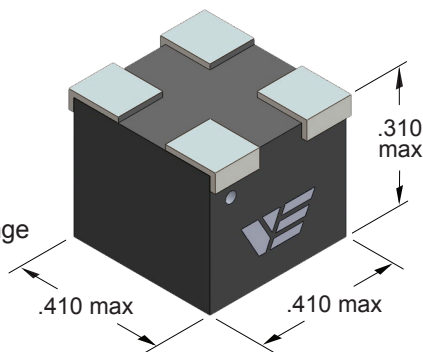
FEATURES

- **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

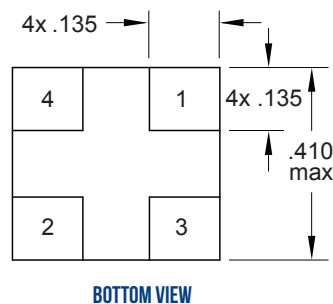
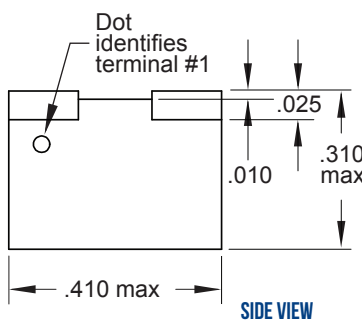
- Filter inductors
- Power supplies
- Ripple suppressors
- DC/DC converters
- Common mode chokes
- SEPIC converters
- Isolation transformers

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

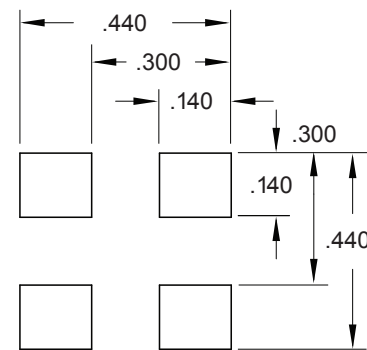


THRU-HOLE & GULL-WING PACKAGES ALSO AVAILABLE

MARKINGS: LASER ETCH OR INK

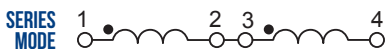


IN	MM
0.440	11.18
0.410	10.41
0.310	7.87
0.300	7.62
0.140	3.57
0.135	3.43
0.025	0.64
0.010	0.25

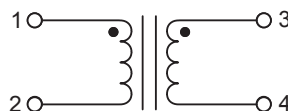


RECOMMENDED MOUNTING PAD CIRCUIT SIDE

TYPICAL USER CONNECTIONS



SCHEMATIC



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DATA TABLE

Vanguard P/N	Series Inductance (mH ±10%)	Series Rated DC Current (mA)	Series DCR max (Ohms)	Parallel Inductance (mH ±10%)	Parallel Rated DC Current (mA)	Parallel DCR max (Ohms)	Package A-
S60003	0.100	780	0.37	0.025	1560	0.093	3
S60007	0.250	530	0.82	0.062	1060	0.205	3
S60011	0.500	380	1.62	0.125	760	0.405	3
S60015	0.750	310	2.50	0.187	620	0.625	3
S60019	1.000	270	3.37	0.250	540	0.843	3
S60023	2.000	190	6.75	0.500	380	1.690	3
S60027	3.000	160	10.12	0.750	320	2.530	3
S60031 ♦	5.000	120	16.87	1.250	240	4.220	3
S60035 ♦	7.500	100	25.37	1.875	200	6.350	3
S60039 ♦	10.000	80	33.75	2.500	160	8.440	3

Inductance measured at 10 kHz, 0.1 V_{RMS}

♦ Class "S" is available by issuing a waiver to MIL-STD-981 wire size requirements

CUSTOM DESIGNS & MODIFICATIONS:

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

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