



## 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<sub>RMS</sub>
- Thermally stable inductance within 2% over operating temperature range
- **Low Outgassing:** TML <1%
- **Different electrical values available upon request**

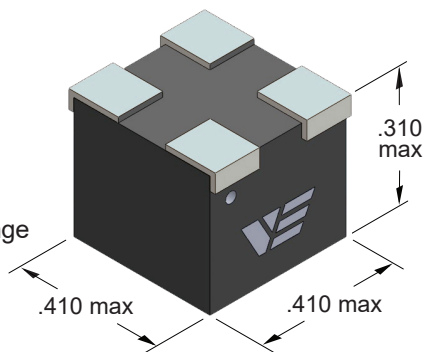
### FEATURES

- **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

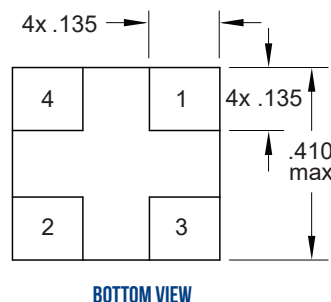
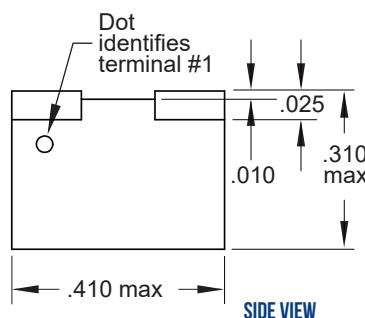
- Filter inductors
- Power supplies
- Ripple suppressors
- DC/DC converters
- Common mode chokes
- SEPIC converters
- Isolation transformers

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

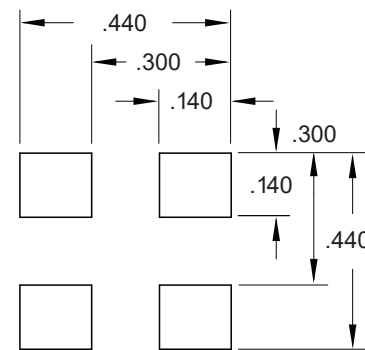


THRU-HOLE & GULL-WING PACKAGES ALSO AVAILABLE

MARKINGS: LASER ETCH OR INK



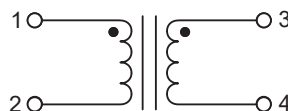
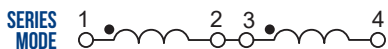
IN	MM
0.440	11.18
0.410	10.41
0.310	7.87
0.300	7.62
0.140	3.57
0.135	3.43
0.025	0.64
0.010	0.25



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<sub>RMS</sub>

♦ **Note:** Part numbers noted are MIL-STD-981, Class "S" compliant with the exception of wire size. All other aspects are met 100%. Contact Vanguard for more information

**CUSTOM DESIGNS & MODIFICATIONS:**

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

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