



S60000 SERIES

PACKAGE A5 REF: M27/372



ALL PARTS AVAILABLE AS CLASS S OR CLASS B

MIL-STD-981

Inductance Range (uH)	DCR max (Ohms)	Current Rating (mA)
2.76 to 10000	0.006 to 15.20	180 to 9600

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% of initial
- **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**

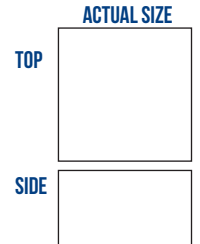
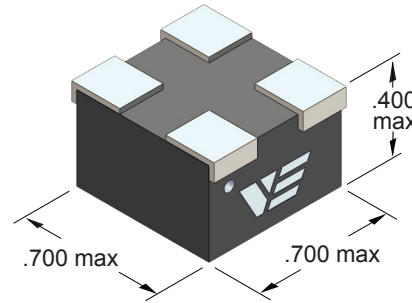
FEATURES

- **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

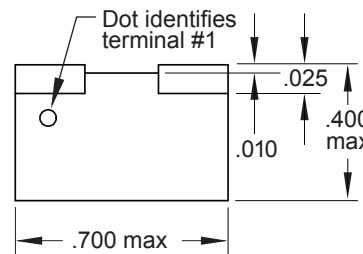
- Filter inductors
- Power supplies
- Ripple suppressors
- DC/DC converters
- Common mode chokes
- SEPIC converters
- Isolation transformers

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

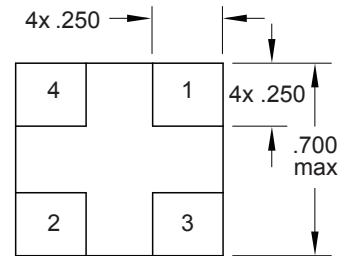


THRU-HOLE & GULL-WING PACKAGES ALSO AVAILABLE

MARKINGS: LASER ETCH OR INK

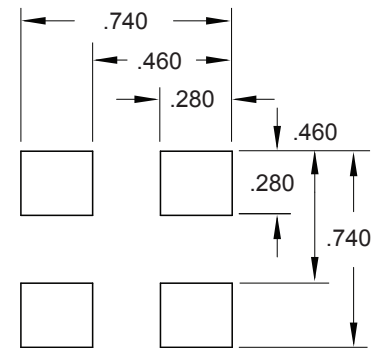


SIDE VIEW



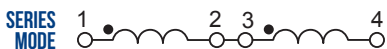
BOTTOM VIEW

IN	MM
0.740	18.80
0.700	17.78
0.460	11.68
0.400	10.16
0.280	7.11
0.250	6.35
0.025	0.64
0.010	0.25

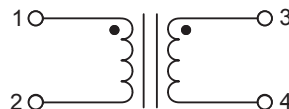


RECOMMENDED MOUNTING PAD CIRCUIT SIDE

TYPICAL USER CONNECTIONS



SCHEMATIC



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DATA TABLE

Vanguard P/N	Series Inductance (uH ±12%)	Series Rated DC Current (mA)	Series DCR max (Ohms)	Parallel Inductance (uH ±12%)	Parallel Rated DC Current (mA)	Parallel DCR max (Ohms)	Size Code
S60041	11	4800	0.024	2.76	9600	0.006	5
S60042	18	3700	0.036	4.50	7400	0.009	5
S60043	27	3000	0.052	6.75	6000	0.013	5
S60044	38	2500	0.076	9.50	5000	0.019	5
S60045	44	2400	0.084	11.00	4800	0.021	5
S60046	100	1600	0.20	25.00	3200	0.050	5
S60047	200	1100	0.46	50.00	2200	0.115	5
S60048	400	800	0.84	100.00	1600	0.210	5
S60049	500	710	1.16	125.00	1420	0.290	5
S60050	750	570	1.76	187.50	1140	0.440	5
S60051	1000	500	2.00	250.00	1000	0.500	5
S60052	2000	350	4.32	500.00	700	1.075	5
S60053	3000	290	6.64	750.00	580	1.660	5
S60054	4000	250	7.68	1000.00	500	1.920	5
S60055	7500	180	16.20	1875.00	360	4.050	5
S60056	10000	150	18.80	2500.00	300	4.700	5
S60057	11	6000	0.020	2.75	12000	0.005	5
S60058	18	4600	0.032	4.50	9200	0.008	5
S60059	27	3700	0.044	6.75	7400	0.011	5
S60060	38	3100	0.064	9.50	6200	0.016	5
S60061	44	3000	0.068	11.00	6000	0.017	5
S60062	100	2000	0.152	25.00	4000	0.038	5
S60063	200	1300	0.340	50.00	2600	0.085	5
S60064	400	890	0.600	100.00	1780	0.150	5
S60065	500	800	0.848	125.00	1600	0.212	5
S60066	750	700	1.32	187.50	1400	0.330	5
S60067	1000	600	1.52	250.00	1200	0.380	5
S60068	2000	430	3.40	500.00	860	0.850	5
S60069	3000	360	5.20	750.00	720	1.300	5
S60070	4000	310	6.08	1000.00	620	1.520	5
S60071	7500	220	13.20	1875.00	440	3.300	5
S60072	10000	180	15.20	2500.00	360	3.800	5

Inductance 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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