



60000 SERIES

PACKAGE A4 QPL: M27/372



MIL-PRF-27

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:** $\geq 70\%$ of initial
- **Dielectric Withstanding Voltage:** 100 V_{RMS}
- **Different electrical values available upon request**

FEATURES

- **Compact**, low profile, ideal for automatic placement
- Built to meet **MIL-PRF-27** 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**

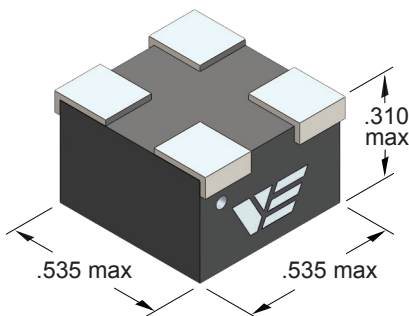
APPLICATIONS

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

ORDERING INFORMATION

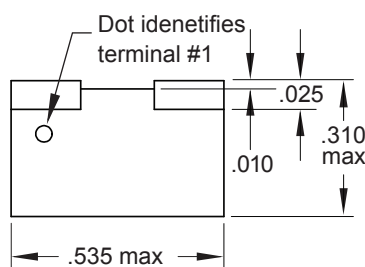
- Order to Mil-spec part number or VE part number

Inductance Range (mH)	DCR max (Ohms)	Current Rating (mA)
0.025 to 10.000	0.053 to 18.25	140 to 2700

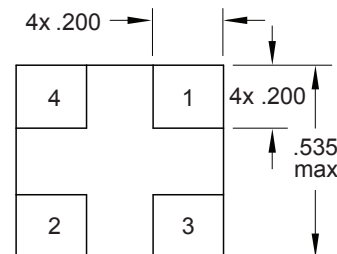


THRU-HOLE & GULL-WING PACKAGES ALSO AVAILABLE

MARKINGS: LASER ETCH OR INK

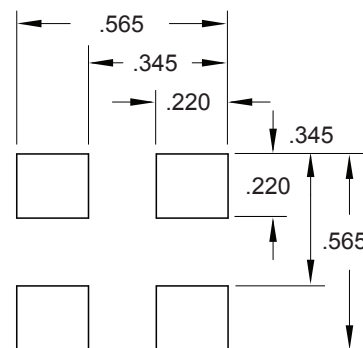


SIDE VIEW



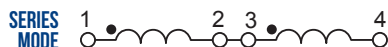
BOTTOM VIEW

IN	MM
0.565	14.35
0.535	13.59
0.345	8.76
0.310	7.87
0.220	5.59
0.200	5.08
0.025	0.64
0.010	0.25

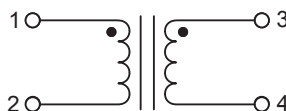


RECOMMENDED MOUNTING PAD CIRCUIT SIDE

TYPICAL USER CONNECTIONS



SCHEMATIC



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DATA TABLE

Vanguard P/N	M27/372 QPL	Series Inductance (mH $\pm 10\%$)	Series Rated DC Current (mA)	Series DCR max (Ohms)	Parallel Inductance (mH $\pm 10\%$)	Parallel Rated DC Current (mA)	Parallel DCR max (Ohms)
60004	-004	0.100	1350	0.21	0.025	2700	0.053
60008	-008	0.250	930	0.41	0.062	1860	0.103
60012	-012	0.500	660	0.82	0.125	1320	0.205
60016	-016	0.750	540	1.25	0.187	1080	0.313
60020	-020	1.000	470	1.87	0.250	940	0.468
60024	-024	2.000	330	3.62	0.500	660	0.910
60028	-028	3.000	270	5.50	0.750	540	1.380
60032	-032	5.000	210	9.12	1.250	420	2.280
60036	-036	7.500	170	13.75	1.875	340	3.440
60040	-040	10.000	140	18.25	2.500	280	4.570

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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