



60000 SERIES

PACKAGE A1 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:** ≥ 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**

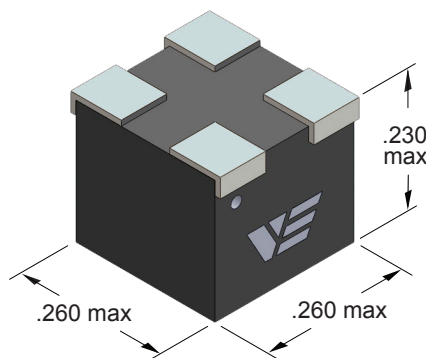
APPLICATIONS

- 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	0.400 to 128.00	20 to 600

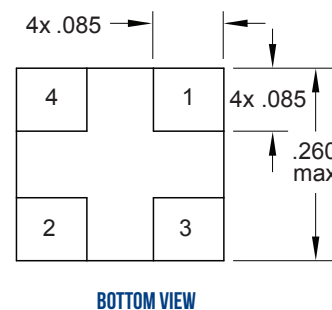
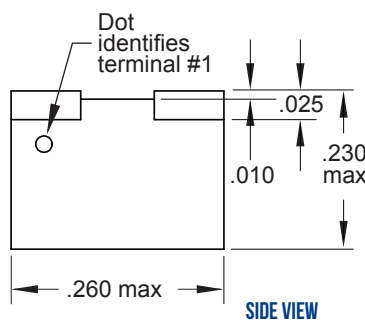


ACTUAL SIZE

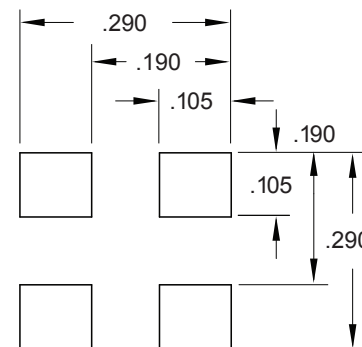


THRU-HOLE & GULL-WING PACKAGES ALSO AVAILABLE

MARKINGS: LASER ETCH OR INK

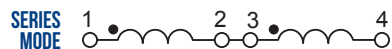


IN	MM
0.290	7.37
0.260	6.60
0.230	5.84
0.190	4.83
0.105	2.67
0.085	2.16
0.025	0.64
0.010	0.25

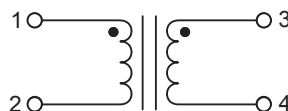


RECOMMENDED MOUNTING PAD CIRCUIT SIDE

TYPICAL USER CONNECTIONS



SCHEMATIC



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DATA TABLE

Vanguard P/N	QPL P/N M27/372	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)
60001	-001	0.100	300	1.60	0.025	600	0.400
60005	-005	0.250	200	3.11	0.062	400	0.778
60009	-009	0.500	150	6.14	0.125	300	1.535
60013	-013	0.750	120	9.45	0.187	240	2.363
60017	-017	1.000	95	12.85	0.250	190	3.213
60021	-021	2.000	75	25.60	0.500	150	6.400
60025	-025	3.000	60	38.40	0.750	120	9.600
60029	-029	5.000	45	64.00	1.250	90	16.000
60033	-033	7.500	30	96.00	1.875	60	24.000
60037	-037	10.000	20	128.00	2.500	40	32.000

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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