



60000 SERIES

PACKAGE A0 QPL: M27/372



MIL-PRF-27

Inductance Range (uH)	DCR max (Ohms)	Current Rating (mA)
0.020 to 100.00	0.005 to 2.40	250 to 6600

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

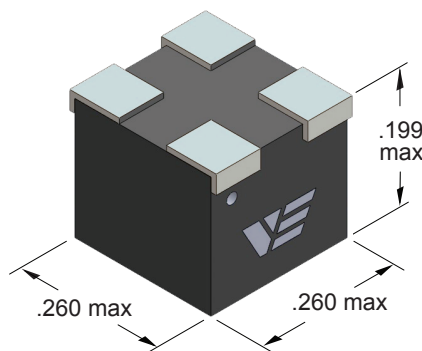
- **Compact**, low profile, ideal for automatic placement
- Built to meet **MIL-PRF-27** specifications
- **Terminations:** Tin-lead
- **Welded Internal Connections**
- **Moisture, Shock and Immersion Resistant**
- **Magnetically Shielded**
- **Multiple Configurations:** Series, parallel, transformer, dual inductor
- **Other termination finishes available**

APPLICATIONS

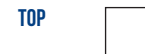
- Filter inductors
- Power supplies
- Ripple suppressors
- DC/DC converters
- Common mode chokes
- SEPIC converters
- Isolation transformers

ORDERING INFORMATION

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

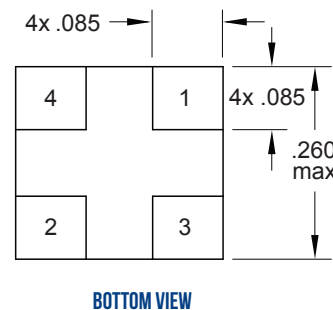
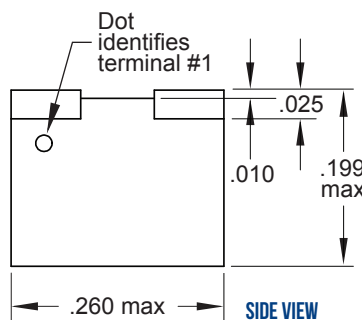


ACTUAL SIZE

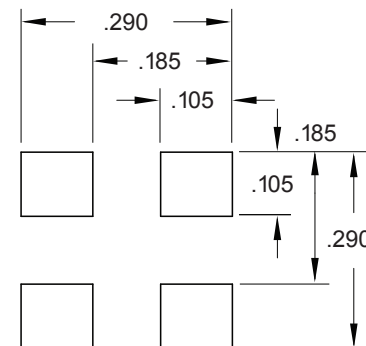


THRU-HOLE & GULL-WING PACKAGES ALSO AVAILABLE

MARKINGS: LASER ETCH OR INK

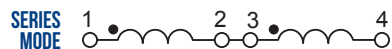


IN	MM
0.290	7.37
0.260	6.60
0.199	5.05
0.185	4.70
0.105	2.67
0.085	2.16
0.025	0.64
0.010	0.25

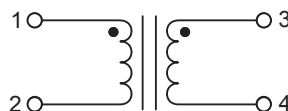


RECOMMENDED MOUNTING PAD CIRCUIT SIDE

TYPICAL USER CONNECTIONS



SCHEMATIC





DATA TABLE

Vanguard P/N	QPL P/N M27/372	Series Inductance (uH ±20%)	Series Rated DC Current (mA)	Series DCR max (Ohms)	Parallel Inductance (uH ±20%)	Parallel Rated DC Current (mA)	Parallel DCR max (Ohms)
60073	-073	0.08	3300	0.020	0.020	6600	0.005
60074	-074	0.14	2800	0.024	0.035	5600	0.006
60075	-075	0.22	2400	0.036	0.055	4800	0.009
60076	-076	0.44	1800	0.056	0.110	3600	0.014
60077	-077	0.56	1500	0.072	0.140	3000	0.018
60078	-078	0.60	2300	0.036	0.150	4600	0.009
60079	-079	0.86	1900	0.048	0.215	3800	0.012
60080	-080	1.36	1900	0.048	0.340	3800	0.012
60081	-081	1.86	1800	0.052	0.465	3600	0.013
60082	-082	2.44	1700	0.060	0.610	3400	0.015
60083	-083	3.46	1500	0.064	0.865	3000	0.016
60084	-084	4.40	1200	0.080	1.10	2400	0.020
60085	-085	5.40	1000	0.120	1.35	2000	0.030
60086	-866	7.80	950	0.160	1.95	1900	0.040
60087	-087	10.60	850	0.240	2.65	1700	0.060
60088	-088	12.16	800	0.260	3.04	1600	0.065
60089	-089	13.80	750	0.280	3.45	1500	0.070
60090	-090	17.48	650	0.360	4.37	1300	0.090
60091	-091	19.52	600	0.400	4.88	1200	0.100
60092	-092	21.60	550	0.500	5.40	1100	0.125
60093	-093	26.20	500	0.560	6.55	1000	0.140
60094	-094	31.20	450	0.600	7.80	900	0.150
60095	-095	48.60	400	0.900	12.15	800	0.225
60096	-096	58.80	350	1.30	14.70	700	0.325
60097	-097	78.00	300	1.52	19.50	600	0.380
60098	-098	90.80	280	2.20	22.70	560	0.550
60099	-099	100.00	250	2.40	25.00	500	0.600

S60086 thru S60099 are ±12% tolerance

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

60000 SERIES

PACKAGE A0

