



42000 SERIES SIZE CODE 5 QPL: M27/356



MIL-PRF-27

ELECTRICAL SPECIFICATIONS

- **Operating Temperature:** -55°C to +130°C
- **Storage Temperature:** -60°C to +135°C
- **Temperature Rise @ 100°C:** ≤ 30°C
- **Inductance at rated DC:** ≥ 80% of initial
- **Dielectric Withstanding Voltage:** 200 V_{RMS}
- **Different electrical values available upon request**

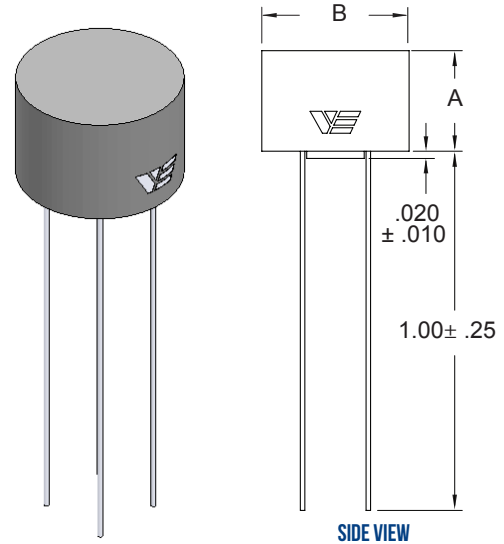
FEATURES

- **Compact**, low profile, ideal for automatic placement
- Built to meet **MIL-PRF-27** specifications
- **Terminations:** Tin-lead
- **Magnetically shielded**
- **Other termination finishes available**
- **Order** to Mil-spec part number or VE part number

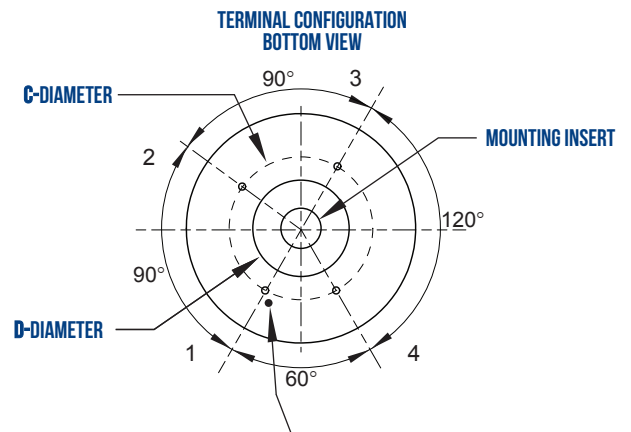
APPLICATIONS

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

Inductance Range (mH)	DCR (Ohms)	Current Rating (Amps)
0.025 to 20	0.015 to 10.2	0.29 to 7.76



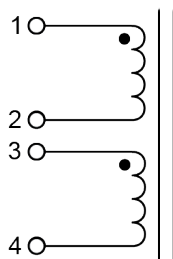
SIZE CODE	A MAX	B MAX	C ± .010	D ± .010	INSERT	TERMINAL DIAMETER
5 (IN)	.635	.950	.670	.570	.138-32 UNC-2B	.020 ± .002
5 (MM)	16.12	24.13	17.0	14.48	.200 MIN DEEP	0.51



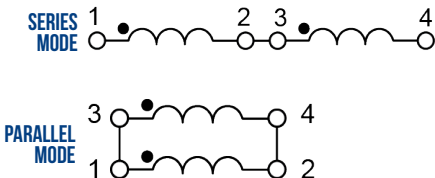
White dot identifies terminal. 1 Terminals are clockwise from pin 1.

MARKINGS: LASER ETCH OR INK

SCHEMATIC



TYPICAL USER CONNECTIONS



42000 SERIES

SIZE CODE5





DATA TABLE

M27/356 Dash No.	Vanguard Part Number	Series Inductance (mH)*	Series DC Current max (Amps)	Series DCR (Ohms ±25%)	Parallel Inductance (mH)	Parallel DC Current max (Amps)	Parallel DCR (Ohms ±25%)
-05	42651	20	0.29	10.2	5	0.58	2.55
-10	42656	15	0.33	7.7	3.75	0.66	1.925
-15	42661	10	0.40	5.1	2.5	0.80	1.275
-20	42666	7.5	0.49	3.8	1.88	0.98	0.95
-25	42671	5.0	0.6	2.6	1.25	1.2	0.65
-30	42676	3	0.78	1.5	0.75	1.56	.375
-35	42681	2	0.95	1	0.5	1.9	0.25
-40	42686	1	1.3	0.5	0.25	2.6	0.125
-45	42691	0.750	1.6	0.38	0.1875	3.2	0.095
-50	42696	0.500	1.9	0.25	0.125	3.8	0.0625
-55	42701	0.250	2.7	0.13	0.0625	5.4	0.0325
-60	42706	0.100	3.88	0.06	0.025	7.76	0.015

Inductance measured at 10 kHz, 0.1 V_{RMS}

*Inductance tolerance +25/-5 %

CUSTOM DESIGNS & MODIFICATIONS:

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

42000 SERIES

SIZE CODE5

