

# VANGUARD ELECTRONICS

## Power Inductors

Package A1: 59 to 820 mA, 15 to 3,000 uH, .110 to 24.7 DCR Ohms max

Similar to M27/356

### ELECTRICAL SPECIFICATIONS

| VE Part Number | Inductance uH ±10% | DC Resistance Ohms Max. | Rated D.C. mA |
|----------------|--------------------|-------------------------|---------------|
| 62101          | 15                 | 0.11                    | 820           |
| 62102          | 18                 | 0.12                    | 750           |
| 62103          | 20                 | 0.15                    | 720           |
| 62104          | 22                 | 0.16                    | 690           |
| 62105          | 25                 | 0.17                    | 650           |
| 62106          | 27                 | 0.18                    | 610           |
| 62107          | 30                 | 0.22                    | 580           |
| 62108          | 33                 | 0.25                    | 550           |
| 62109          | 39                 | 0.27                    | 520           |
| 62110          | 47                 | 0.30                    | 460           |
| 62111          | 50                 | 0.32                    | 440           |
| 62112          | 56                 | 0.33                    | 430           |
| 62113          | 68                 | 0.36                    | 390           |
| 62114          | 75                 | 0.38                    | 370           |
| 62115          | 82                 | 0.39                    | 350           |
| 62116          | 100                | 0.71                    | 320           |
| 62117          | 120                | 0.78                    | 290           |
| 62118          | 150                | 0.88                    | 260           |
| 62119          | 180                | 1.20                    | 240           |
| 62120          | 200                | 1.25                    | 230           |

| VE Part Number | Inductance uH ±10% | DC Resistance Ohms Max. | Rated D.C. mA |
|----------------|--------------------|-------------------------|---------------|
| 62121          | 220                | 0.11                    | 220           |
| 62122          | 250                | 0.12                    | 200           |
| 62123          | 270                | 0.15                    | 190           |
| 62124          | 300                | 0.16                    | 180           |
| 62125          | 330                | 0.17                    | 170           |
| 62126          | 350                | 0.18                    | 165           |
| 62127          | 390                | 0.22                    | 160           |
| 62128          | 470                | 0.25                    | 140           |
| 62129          | 500                | 0.27                    | 135           |
| 62130          | 560                | 0.30                    | 130           |
| 62131          | 680                | 0.11                    | 120           |
| 62132          | 750                | 0.12                    | 115           |
| 62133          | 820                | 0.15                    | 110           |
| 62134          | 1000               | 0.16                    | 100           |
| 62135          | 1200               | 0.17                    | 93            |
| 62136          | 1500               | 0.18                    | 83            |
| 62137          | 1800               | 0.22                    | 75            |
| 62138          | 2000               | 0.25                    | 70            |
| 62139          | 2200               | 0.27                    | 68            |
| 62140          | 2700               | 0.30                    | 62            |
| 62141          | 3000               | 0.30                    | 59            |

### FEATURES

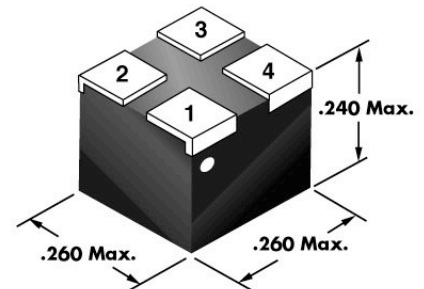
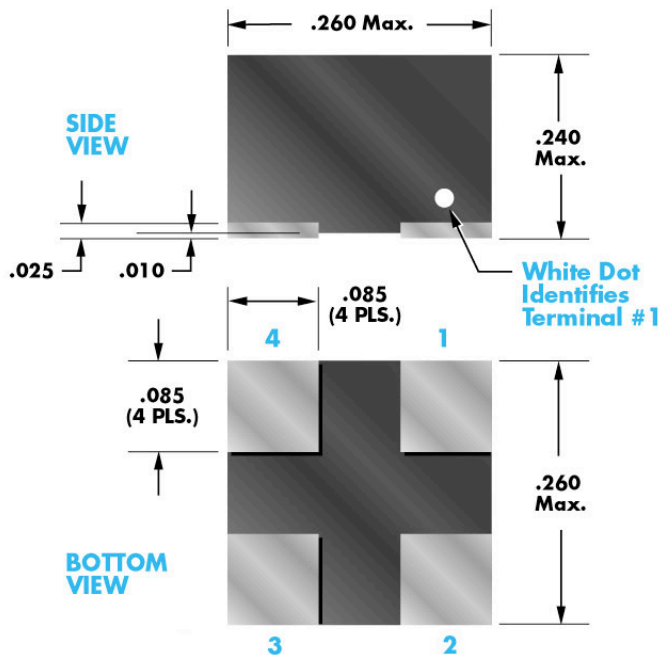
- Compact, low profile package, ideal for automatic placement
- Leadless Device for minimum footprint
- Low Thermal Expansion permits mounting on most substrate materials
- Different values and tighter tolerances available on special order
- Welded Internal Connections, Transfer Molded Package
- Toroidal Construction produces shielding and low external magnetic field

### CHARACTERISTICS

- **Operating Temperature Range:** -55 °C to +125 °C
- **Temperature Rise (@ 90 °C):** < 30 °C
- **Inductance drop at rated DC:** < 30%
- **Mounting and TCE:** Call Factory for Application Note
- **Dielectric Withstanding Voltage:** 500 Vac
- **Delta L:** ± 2% over operating temperature range
- **Terminations:** Tin-Lead Coated Phosphor Bronze
- **Altitude:** 70,000 feet or more (1.31 inHg or less)
- **Resistance to Soldering Heat:** 265 °C for 10 secs
- **Moisture, Shock and Immersion Resistant**
- **Overload Current:** 1.5 times rated current

### APPLICATIONS

- Filter inductors
- Ripple suppressors



| IN    | MM    |
|-------|-------|
| 0.535 | 13.59 |
| 0.410 | 10.41 |
| 0.310 | 7.87  |
| 0.260 | 6.60  |
| 0.230 | 5.84  |
| 0.200 | 5.08  |
| 0.135 | 3.43  |
| 0.085 | 2.16  |
| 0.025 | 0.64  |
| 0.010 | 0.26  |

CONVERSION

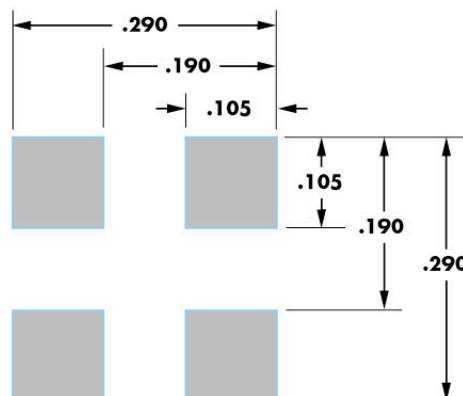
Actual Size (Side)



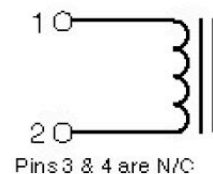
Actual Size (Top)



RECOMMENDED MOUNTING PAD  
CIRCUIT SIDE



### TYPICAL USER CONNECTIONS



**62,000 SERIES**  
**PACKAGE A1**



VANGUARD ELECTRONICS  
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