

RXT60000 SERIES  
PACKAGE A5

+200°C

| Inductance Range (uH) | DCR max (Ohms) | Current Rating (mA) |
|-----------------------|----------------|---------------------|
| 2.76 to 10000         | 0.006 to 15.20 | 180 to 4800         |

## ELECTRICAL SPECIFICATIONS

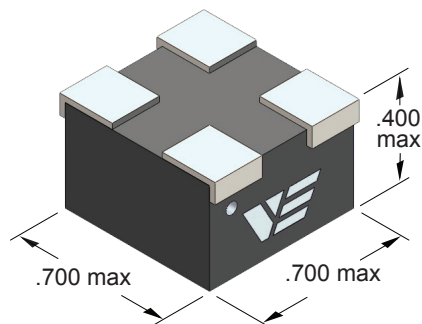
- **Operating Temperature:** -40°C to +200°C
- **Storage Temperature:** -45°C to +205°C
- **Temperature Rise:** < 30°C
- **Inductance at rated DC:**  $\geq 70\%$  of initial
- **Dielectric Withstanding Voltage:** 100 V<sub>RMS</sub>
- **Different electrical values available upon request**

## FEATURES

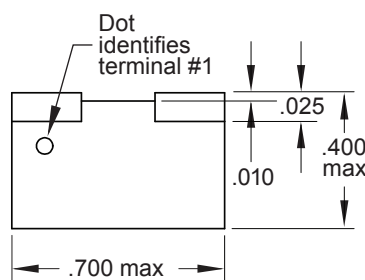
- **Ideal** for geophysical applications in environments  $\leq 200^\circ\text{C}$
- **Compact**, low profile, ideal for automatic placement
- **Terminations:** RoHS
- **Welded Internal Connections** - no reflow risk
- **Moisture, Shock and Immersion Resistant**
- **Magnetically Shielded**
- **Other RoHS compliant solder alloy coatings available**
- **Multiple Configurations:** Series, parallel, transformer, dual inductor

## APPLICATIONS

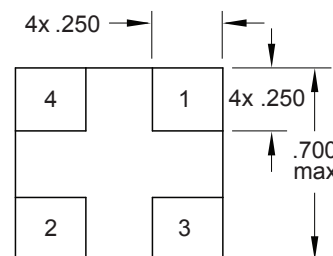
- Filter inductors
- Power supplies
- Ripple suppressors
- DC/DC converters
- Common mode chokes
- SEPIC converters
- Isolation transformers

THRU-HOLE &  
GULL-WING PACKAGES  
ALSO AVAILABLE

MARKINGS: LASER ETCH OR INK

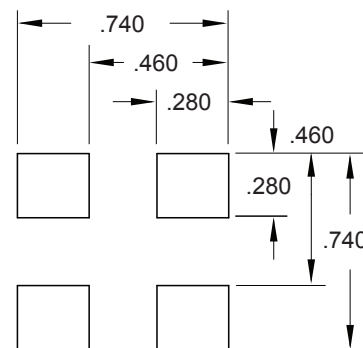


SIDE VIEW



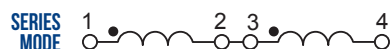
BOTTOM VIEW

| IN    | MM    |
|-------|-------|
| 0.740 | 18.80 |
| 0.700 | 17.78 |
| 0.460 | 11.68 |
| 0.400 | 10.16 |
| 0.280 | 7.11  |
| 0.250 | 6.35  |
| 0.025 | 0.64  |
| 0.010 | 0.25  |

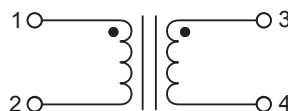


RECOMMENDED MOUNTING PAD CIRCUIT SIDE

## TYPICAL USER CONNECTIONS



## SCHEMATIC

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DATA TABLE

| Vanguard P/N | Series Inductance (uH $\pm 12\%$ ) | Series Rated DC Current (mA) | Series DCR max (Ohms) | Parallel Inductance (uH $\pm 12\%$ ) | Parallel Rated DC Current (mA) | Parallel DCR max (Ohms) | Package A- |
|--------------|------------------------------------|------------------------------|-----------------------|--------------------------------------|--------------------------------|-------------------------|------------|
| RXT60041     | 11                                 | 4800                         | 0.024                 | 2.76                                 | 9600                           | 0.006                   | 5          |
| RXT60042     | 18                                 | 3700                         | 0.036                 | 4.50                                 | 7400                           | 0.009                   | 5          |
| RXT60043     | 27                                 | 3000                         | 0.052                 | 6.75                                 | 6000                           | 0.013                   | 5          |
| RXT60044     | 38                                 | 2500                         | 0.076                 | 9.50                                 | 5000                           | 0.019                   | 5          |
| RXT60045     | 44                                 | 2400                         | 0.084                 | 11.00                                | 4800                           | 0.021                   | 5          |
| RXT60046     | 100                                | 1600                         | 0.20                  | 25.00                                | 3200                           | 0.050                   | 5          |
| RXT60047     | 200                                | 1100                         | 0.46                  | 50.00                                | 2200                           | 0.115                   | 5          |
| RXT60048     | 400                                | 800                          | 0.84                  | 100.00                               | 1600                           | 0.210                   | 5          |
| RXT60049     | 500                                | 710                          | 1.16                  | 125.00                               | 1420                           | 0.290                   | 5          |
| RXT60050     | 750                                | 570                          | 1.76                  | 187.50                               | 1140                           | 0.440                   | 5          |
| RXT60051     | 1000                               | 500                          | 2.00                  | 250.00                               | 1000                           | 0.500                   | 5          |
| RXT60052     | 2000                               | 350                          | 4.32                  | 500.00                               | 700                            | 1.075                   | 5          |
| RXT60053     | 3000                               | 290                          | 6.64                  | 750.00                               | 580                            | 1.660                   | 5          |
| RXT60054     | 4000                               | 250                          | 7.68                  | 1000.00                              | 500                            | 1.920                   | 5          |
| RXT60055     | 7500                               | 180                          | 16.20                 | 1875.00                              | 360                            | 4.050                   | 5          |
| RXT60056     | 10000                              | 150                          | 18.80                 | 2500.00                              | 300                            | 4.700                   | 5          |
| RXT60057     | 11                                 | 6000                         | 0.020                 | 2.75                                 | 12000                          | 0.005                   | 5          |
| RXT60058     | 18                                 | 4600                         | 0.032                 | 4.50                                 | 9200                           | 0.008                   | 5          |
| RXT60059     | 27                                 | 3700                         | 0.044                 | 6.75                                 | 7400                           | 0.011                   | 5          |
| RXT60060     | 38                                 | 3100                         | 0.064                 | 9.50                                 | 6200                           | 0.016                   | 5          |
| RXT60061     | 44                                 | 3000                         | 0.068                 | 11.00                                | 6000                           | 0.017                   | 5          |
| RXT60062     | 100                                | 2000                         | 0.152                 | 25.00                                | 4000                           | 0.038                   | 5          |
| RXT60063     | 200                                | 1300                         | 0.340                 | 50.00                                | 2600                           | 0.085                   | 5          |
| RXT60064     | 400                                | 890                          | 0.600                 | 100.00                               | 1780                           | 0.150                   | 5          |
| RXT60065     | 500                                | 800                          | 0.848                 | 125.00                               | 1600                           | 0.212                   | 5          |
| RXT60066     | 750                                | 700                          | 1.32                  | 187.50                               | 1400                           | 0.330                   | 5          |
| RXT60067     | 1000                               | 600                          | 1.52                  | 250.00                               | 1200                           | 0.380                   | 5          |
| RXT60068     | 2000                               | 430                          | 3.40                  | 500.00                               | 860                            | 0.850                   | 5          |
| RXT60069     | 3000                               | 360                          | 5.20                  | 750.00                               | 720                            | 1.300                   | 5          |
| RXT60070     | 4000                               | 310                          | 6.08                  | 1000.00                              | 620                            | 1.520                   | 5          |
| RXT60071     | 7500                               | 220                          | 13.20                 | 1875.00                              | 440                            | 3.300                   | 5          |
| RXT60072     | 10000                              | 180                          | 15.20                 | 2500.00                              | 360                            | 3.800                   | 5          |

Inductance measured at 10 kHz, 0.1 V<sub>RMS</sub>**CUSTOM DESIGNS & MODIFICATIONS:**

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

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