



## SIT200 SERIES PACKAGE A2



ALL PARTS AVAILABLE AS CLASS S OR CLASS B

MIL-STD-981

| Inductance Range (mH) | DCR max (Ohms) | Total Current max (Arms) |
|-----------------------|----------------|--------------------------|
| 0.12 to 6.90          | 0.15 to 3.10   | 0.65 to 1.30             |

### ELECTRICAL SPECIFICATIONS

- **Operating Temperature:** -55°C to +125°C
- **Storage Temperature:** -60°C to +130°C
- **Temperature Rise @ 90°C:** < 30°C
- **Dielectric Withstanding Voltage:** 300 V<sub>AC</sub>
- **Resistance to Soldering Heat:** 265°C for 10 secs
- Compliant with NASA outgassing limits
- **Different electrical values available upon request**

### FEATURES

- **Compact**, low profile, ideal for automatic placement
- Built to meet **MIL-STD-981** specifications
- **Terminations:** Tin-lead
- **Welded Internal Connections**
- **Moisture, Shock and Immersion Resistant**
- **Magnetically Shielded**
- **Other termination finishes available**

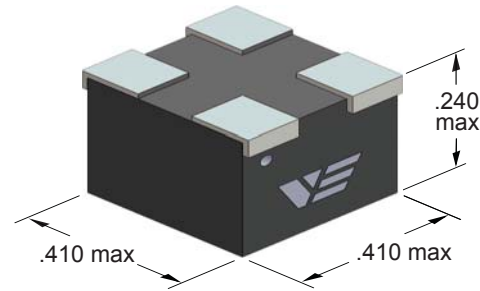
### APPLICATIONS

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

#### MIL-STD-981 Testing:

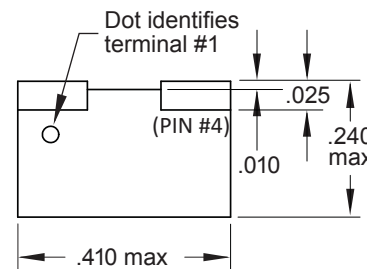
Add "-S" suffix for Class S Testing

Add "-B" suffix for Class B Testing

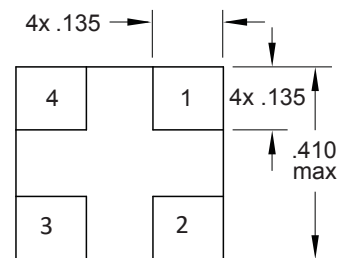


THRU-HOLE & GULL-WING PACKAGES ALSO AVAILABLE

MARKINGS: LASER ETCH OR INK

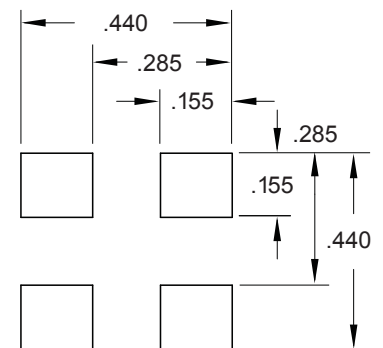


SIDE VIEW



BOTTOM VIEW

| IN    | MM    |
|-------|-------|
| 0.440 | 11.18 |
| 0.410 | 10.41 |
| 0.285 | 7.24  |
| 0.255 | 6.48  |
| 0.240 | 6.09  |
| 0.155 | 3.94  |
| 0.135 | 3.43  |
| 0.025 | 0.64  |
| 0.010 | 0.25  |



RECOMMENDED MOUNTING PAD CIRCUIT SIDE

#### SCHEMATIC



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### DATA TABLE

| Vanguard P/N | Volt-Sec, v-usec, min | Turns Ratio | Primary Inductance mH (Ref) | DCR max (Ohms) |           | Total Current Ip + Is Arms, max |
|--------------|-----------------------|-------------|-----------------------------|----------------|-----------|---------------------------------|
|              |                       |             |                             | Primary        | Secondary |                                 |
| SIT201       | 60                    | 1:1.0       | 6.9                         | 0.77           | 0.77      | 0.65                            |
| SIT202       | 60                    | 1:1.1       | 6.9                         | 0.77           | 0.85      | 0.65                            |
| SIT203       | 60                    | 1:1.2       | 6.9                         | 0.77           | 0.92      | 0.65                            |
| SIT204       | 60                    | 1:2.0       | 6.9                         | 0.77           | 3.10      | 0.65                            |
| SIT205       | 60                    | 1:0.5       | 6.9                         | 0.77           | 0.39      | 0.65                            |
| SIT206       | 40                    | 1:1.0       | 2.9                         | 0.51           | 0.51      | 0.79                            |
| SIT207       | 40                    | 1:1.1       | 2.9                         | 0.51           | 0.56      | 0.79                            |
| SIT208       | 40                    | 1:1.2       | 2.9                         | 0.51           | 0.62      | 0.79                            |
| SIT209       | 40                    | 1:2.0       | 2.9                         | 0.51           | 1.10      | 0.79                            |
| SIT210       | 40                    | 1:0.5       | 2.9                         | 0.51           | 0.30      | 0.79                            |
| SIT211       | 20                    | 1:1.0       | 0.81                        | 0.27           | 0.27      | 1.1                             |
| SIT212       | 20                    | 1:1.1       | 0.81                        | 0.27           | 0.30      | 1.1                             |
| SIT213       | 20                    | 1:1.2       | 0.81                        | 0.27           | 0.32      | 1.1                             |
| SIT214       | 20                    | 1:2.0       | 0.81                        | 0.27           | 0.55      | 1.1                             |
| SIT215       | 20                    | 1:0.5       | 0.81                        | 0.27           | 0.15      | 1.1                             |
| SIT221       | 60                    | 1:1.0       | 0.97                        | 0.77           | 0.77      | 0.78                            |
| SIT222       | 60                    | 1:1.1       | 0.97                        | 0.77           | 0.85      | 0.78                            |
| SIT223       | 60                    | 1:1.2       | 0.97                        | 0.77           | 0.92      | 0.78                            |
| SIT224       | 60                    | 1:2.0       | 0.97                        | 0.77           | 3.10      | 0.78                            |
| SIT225       | 60                    | 1:0.5       | 0.97                        | 0.77           | 0.40      | 0.78                            |
| SIT226       | 40                    | 1:1.0       | 0.42                        | 0.51           | 0.51      | 0.96                            |
| SIT227       | 40                    | 1:1.1       | 0.42                        | 0.51           | 0.56      | 0.96                            |
| SIT228       | 40                    | 1:1.2       | 0.42                        | 0.51           | 0.62      | 0.96                            |
| SIT229       | 40                    | 1:2.0       | 0.42                        | 0.51           | 1.10      | 0.96                            |
| SIT230       | 40                    | 1:0.5       | 0.42                        | 0.51           | 0.30      | 0.96                            |
| SIT231       | 20                    | 1:1.0       | 0.12                        | 0.27           | 0.27      | 1.3                             |
| SIT232       | 20                    | 1:1.1       | 0.12                        | 0.27           | 0.30      | 1.3                             |
| SIT233       | 20                    | 1:1.2       | 0.12                        | 0.27           | 0.32      | 1.3                             |
| SIT234       | 20                    | 1:2.0       | 0.12                        | 0.27           | 0.55      | 1.3                             |
| SIT235       | 20                    | 1:0.5       | 0.12                        | 0.27           | 0.16      | 1.3                             |

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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