



## SCS100 SERIES TRANSFORMERS



ALL PARTS AVAILABLE AS CLASS S OR CLASS B

MIL-STD-981

$I_{PK}$ max (Amps)	ET (V- $\mu$ S)	Turns Ratio
6 to 22	20 to 288	1:50 to 1:200

### ELECTRICAL SPECIFICATIONS

- **Operating Temperature:** -55°C to +125°C
- **Storage Temperature:** -60°C to +130°C
- **Insulation Resistance:** 10K MOhms minimum
- **Different electrical values available upon request**
- **Dielectric Withstanding Voltage:** 500 V<sub>AC</sub>
- **Outgassing compliant per ASTM E595** (TML <1%, CVCM <0.1%)

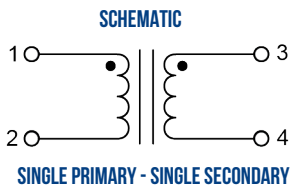
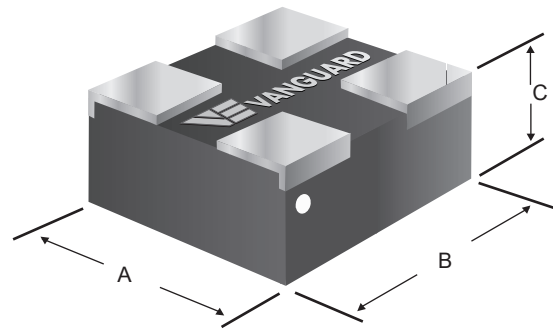
MARKINGS: LASER OR INK  
ALL DIMENSIONS: INCHES

THRU-HOLE AND GULLWING PACKAGES ALSO AVAILABLE

Package	A max.	B max.	C max.
A-1	.260	.260	.240
A-2	.410	.410	.240
A-3	.410	.410	.310
A-4	.535	.535	.310

### FEATURES

- **Compact**, low profile, ideal for automatic placement
- Built to meet **MIL-STD-981** specifications
- **Low Thermal Expansion, Transfer Molded Package**
- **Terminations:** Tin-lead
- **Welded Internal Connections**
- **Moisture, Shock and Immersion Resistant**
- **Resistance to Soldering Heat:** 265°C for 10 seconds
- **Other termination finishes available upon request**
- **MIL-STD-981 Testing:**  
Add “-S” suffix for Class S Testing  
Add “-B” suffix for Class B Testing



Vanguard P/N	** $I_{PK}$ max (Amps)	ET ref (V- $\mu$ S)	DCR max (Ohms)	Inductance ref (mH)	Package	Turns Ratio
SCS101	6	20	1.0	2.8	A-1	1:50
SCS102	12	40	1.2	4.7	A-2	1:50
SCS103	13	40	1.5	4.9	A-3	1:50
SCS104	9	20	1.2	5.7	A-1	1:100
SCS105	12	40	1.7	8.9	A-2	1:100
SCS106	22	144	2.9	21.0	A-4	1:100
♦ SCS107	6	40	5.6	23.0	A-1	1:200
♦ SCS108	13	80	7.9	35.0	A-3	1:200
SCS109	20	288	6.0	86.0	A-4	1:200

Inductance measured at 10 kHz, 0.1 V<sub>RMS</sub>

\*\* Signal generated is a 25% duty cycle pulse wave

♦ Class “S” is available by issuing a waiver to MIL-STD-981 minimum wire size requirements

### CUSTOM DESIGNS & MODIFICATIONS:

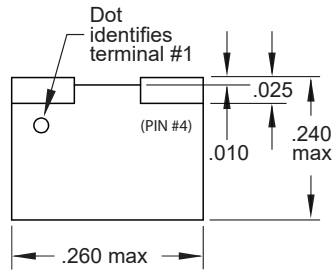
Other electrical configurations and performance characteristics are available in various sizes and package types



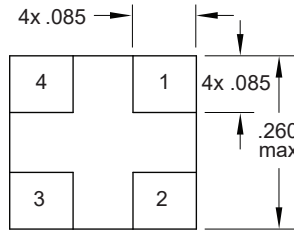


## PACKAGE A1

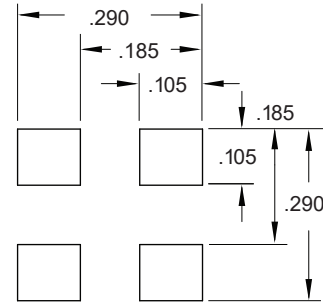
SIDE VIEW



BOTTOM VIEW



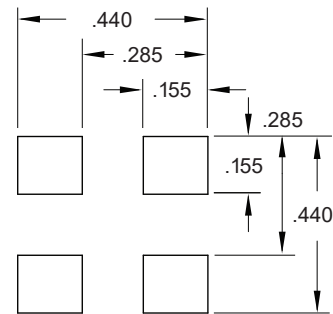
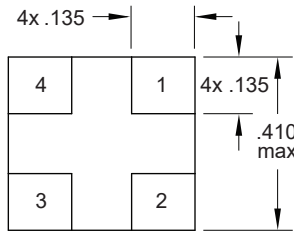
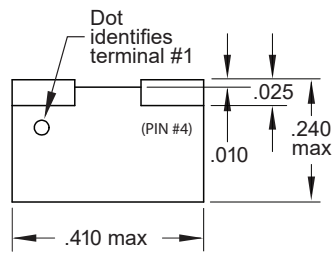
RECOMMENDED MOUNTING PAD CIRCUIT SIDE



DATA TABLE

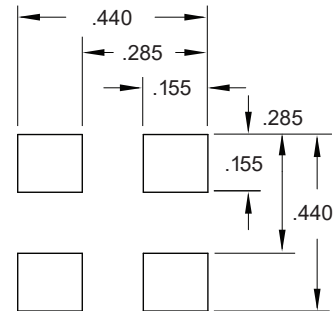
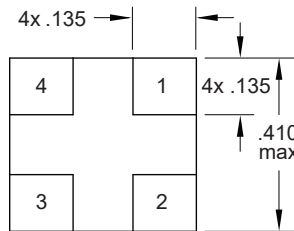
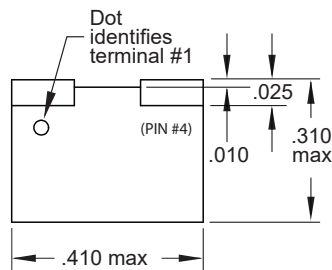
IN	MM
0.290	7.37
0.260	6.60
0.240	6.09
0.185	4.70
0.105	2.67
0.085	2.16
0.025	0.64
0.010	0.25

## PACKAGE A2



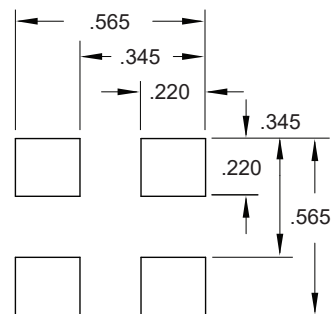
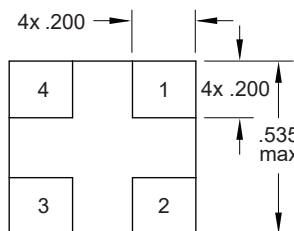
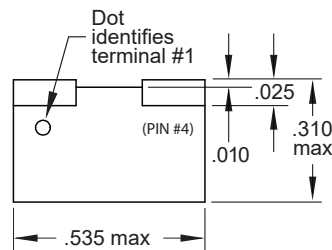
IN	MM
0.440	11.18
0.410	10.41
0.285	7.24
0.255	6.48
0.240	6.09
0.155	3.94
0.135	3.43
0.025	0.64
0.010	0.25

## PACKAGE A3



IN	MM
0.440	11.18
0.410	10.41
0.310	7.87
0.285	7.24
0.155	3.93
0.135	3.43
0.025	0.64
0.010	0.25

## PACKAGE A4



IN	MM
0.565	14.35
0.535	13.59
0.345	8.76
0.310	7.87
0.220	5.59
0.200	5.08
0.025	0.64
0.010	0.25

### CUSTOM DESIGNS & MODIFICATIONS:

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

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