

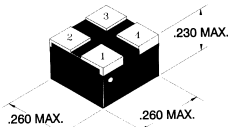
POWER TRANSFORMERS

Current Sensing Transformers CS100 and CS200 SERIES

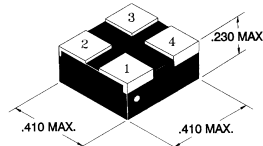
SINGLE PRIMARY - SINGLE SECONDARY

Vanguard	I peak amps	Volt-Sec. v-sec.	D.C. Resistance	Inductance mH	Schematic	Turns Ratio	Package
CS101	5	20	0.85	2.8	1	1:50	A-1
CS102	10	40	1.2	4.4	1	1:50	A-2
CS103	20	40	1.2	4.4	1	1:50	A-3
CS104	5	20	1.2	5.7	1	1:100	A-1
CS105	10	40	1.5	8.9	1	1:100	A-2
CS106	20	144	2.9	21.0	1	1:100	A-4
CS107	5	40	5.6	23.0	1	1:200	A-1
CS108	10	80	7.9	35.0	1	1:200	A-3
CS109	20	288	6.0	85.0	1	1:200	A-4

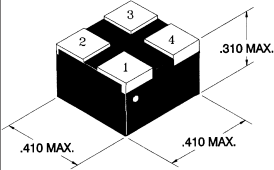
PACKAGE A-1
(not to scale)



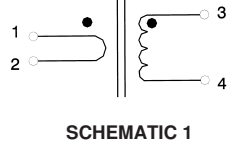
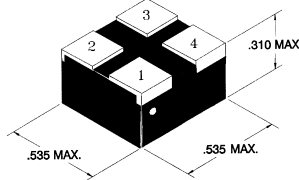
PACKAGE A-2
(not to scale)



PACKAGE A-3
(not to scale)



PACKAGE A-4
(not to scale)



FEATURES

- Compact, low profile package, ideal for automatic insertion
- Built to meet Mil-T-27 specifications
- Leadless device for minimum footprint
- Low Thermal Expansion permits mounting on most substrate materials
- Welded Internal Connections, Transfer Molded Package
- Custom Designs: Other electrical configurations and performance characteristics are available in various sizes and package types.

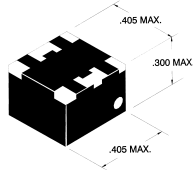
CHARACTERISTICS

- -55°C to +125°C operating temperature range
- Mounting and TCE: Call Factory for Application Note
- Outgassing: - Total Mass Loss < 1%
- Dielectric Withstanding Voltage: 500 Vac
- Terminations: Tin-Lead Coated Phosphor Bronze
- Altitude: 70,000 feet or more (1.31inHg or less)
- Resistance to Soldering Heat: 265°C for 10 secs
- Moisture, Shock and Immersion Resistant
- Insulation Resistance: 10K megohms minimum

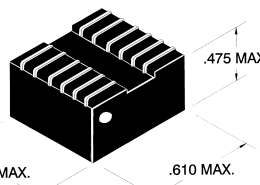
SINGLE PRIMARY - DUAL SECONDARY

Vanguard Part Number	I peak maximum amps	Volt-Sec. v-sec. minimum	D.C. Resistance ohms, max.	Inductance mH (Ref.)	Schematic	Turns Ratio	Package
CS201	5	20	0.72	2.2	2	1:50:50	G-2
CS202	10	40	1.4	5.3	2A	1:50:50	T-2
CS203	10	40	1.4	5.3	2A	1:50:50	T-4
CS204	5	40	3.8	8.9	2	1:100:100	G-2
CS205	10	144	2.9	21.0	2A	1:100:100	T-2
CS206	10	144	2.9	21.0	2A	1:100:100	T-4

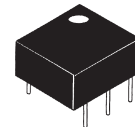
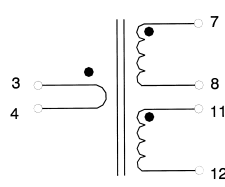
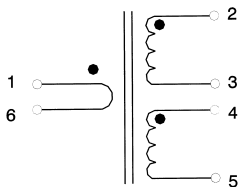
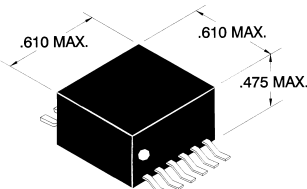
PACKAGE G-2
(not to scale)



PACKAGE T-2
(not to scale)



PACKAGE T-4
(not to scale)



THROUGH-HOLE PACKAGES

Order comparably sized through-hole packages for these transformers by adding "TH" to part numbers.

(Continued on next page)

CS SERIES



VANGUARD ELECTRONICS
(714) 842-3330 WWW.VE1.COM

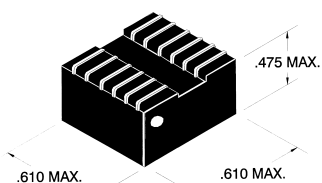
POWER TRANSFORMERS

Current Sensing Transformers CS300 and CS400 SERIES

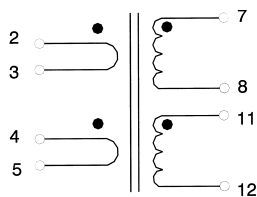
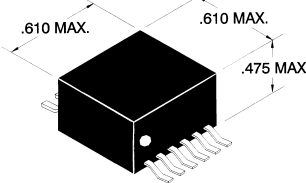
DUAL PRIMARY - DUAL SECONDARY

Vanguard Part Number	I peak amps maximum	Volt-Sec. v-usec. minimum	D.C. Resistance ohms, max.	Inductance mH (Ref.)	Schematic	Turns Ratio	Package
CS301	5	20	0.72	2.2	3	1:1:50:50	T-2
CS302	10	72	1.4	5.3	3	1:1:50:50	T-2
CS303	5	20	0.72	2.2	3	1:1:50:50	T-4
CS304	10	72	1.4	5.3	3	1:1:50:50	T-4
CS305	5	40	3.8	8.9	3	1:1:100:100	T-2
CS306	10	144	2.9	21.0	3	1:1:100:100	T-2
CS307	5	40	3.8	8.9	3	1:1:100:100	T-4
CS308	10	144	2.9	21.0	3	1:1:100:100	T-4

PACKAGE T-2
(not to scale)



PACKAGE T-4
(not to scale)



SCHEMATIC 3

FEATURES

- Compact, low profile package, ideal for automatic insertion
- Built to meet Mil-T-27 specifications
- Leadless device for minimum footprint
- Low Thermal Expansion permits mounting on most substrate materials
- Welded Internal Connections, Transfer Molded Package
- Custom Designs: Other electrical configurations and performance characteristics are available in various sizes and package types.

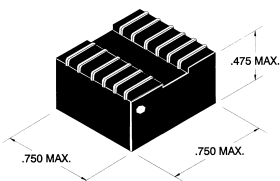
CHARACTERISTICS

- -55°C to +125°C operating temperature range
- Mounting and TCE: Call Factory for Application Note
- Outgassing: - Total Mass Loss < 1%
- Dielectric Withstanding Voltage: 500 Vac
- Terminations: Tin-Lead Coated Phosphor Bronze
- Altitude: 70,000 feet or more (1.31inHg or less)
- Resistance to Soldering Heat: 265°C for 10 secs
- Moisture, Shock and Immersion Resistant
- Insulation Resistance: 10K megohms minimum

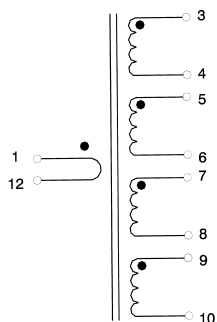
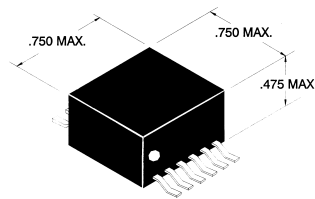
SINGLE PRIMARY - QUAD SECONDARY

Vanguard Part Number	I peak amps maximum	Volt-Sec. v-usec. minimum	D.C. Resistance ohms, max.	Inductance mH (Ref.)	Schematic	Turns Ratio	Package
CS401	10	40	1.5	5.3	4	1:50:50:50:50	T-3
CS402	10	40	1.5	5.3	4	1:50:50:50:50	T-5

PACKAGE T-3
(not to scale)



PACKAGE T-5
(not to scale)



SCHEMATIC 4



THROUGH-HOLE PACKAGES

Order comparably sized through-hole packages for these transformers by adding "TH" to part numbers.

CS SERIES



VANGUARD ELECTRONICS
(714) 842-3330 WWW.VE1.COM