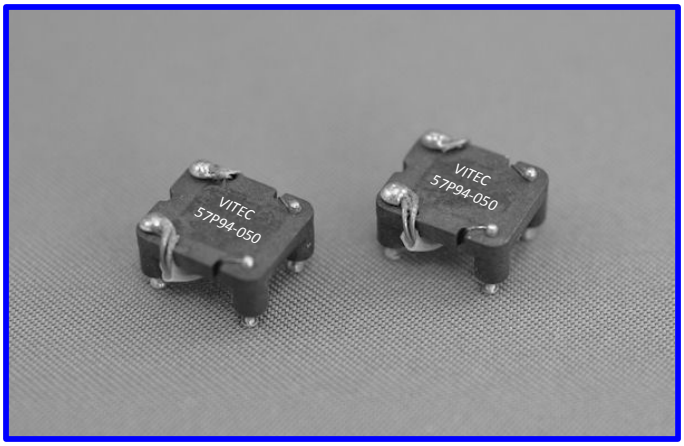
TYPE 57P94

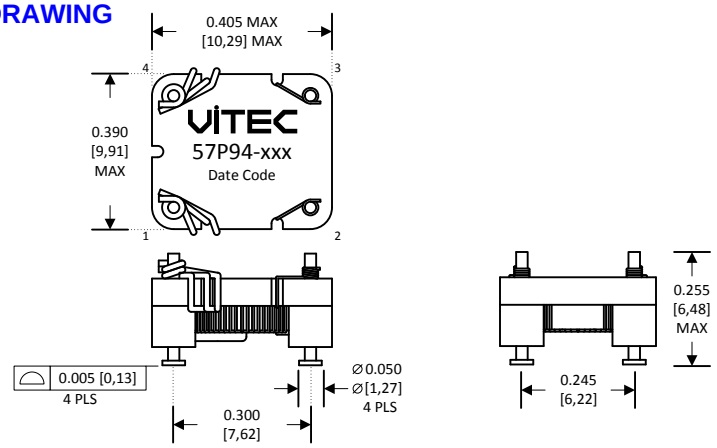
Current Sense Transformers

FEATURES

- Operating temperature from -40°C to 125°C.
- Manufactured to UL recognized 155°C insulation system.
- Materials meet flammability requirements for UL 94V-0.
- Frequency range from 50 KHz to 1 MHz.

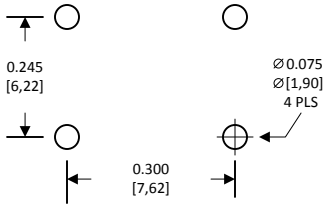


DRAWING



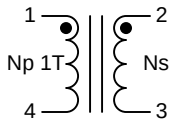
Drawing not to scale. All dimensions given in inches [mm]. Tolerances unless otherwise specified. 0.XX ± 0.01 [0.XX ± 0.13] Angular ±1°

SUGGESTED PCB LAYOUT



Not to Scale

SCHEMATIC



ELECTRICAL CHARACTERISTICS @ +25°C

Part Number		Secondary Inductance (a)	Turns Ratio	Primary DCR	Secondary DCR	Hipot (Pri-Sec)	Rated Current (Primary)
		mH	Ns:Np	Ohm	Ohm	VRMS	A RMS
Classic	RoHS	±25%	±2%	±10%	MAX	60 Hz 2 Sec	@ 50°C Trise
57P94-050	57PR94-050	2.45	50:1	0.00215	0.80	1500	8
57P94-070	57PR94-070	4.80	70:1	0.00215	1.10	1500	8
57P94-080	57PR94-080	6.27	80:1	0.00215	1.30	1500	8
57P94-100	57PR94-100	9.80	100:1	0.00215	1.60	1500	8
57P94-125	57PR94-125	15.31	125:1	0.00215	2.13	1500	8

Add an "R" to the part number after "P" for the RoHS compliant version (i.e. 57PR94-050 is the RoHS compliant version of 57P94-050).

Notes: **(a) Tested at 10 KHz, 0.1 VRMS.**

To determine maximum operation parameters for unipolar current, use the following formulas:
1. Terminating resistor: Rt = (Ns x Vref) / (Np x Ippk)
2. Maximum flux density (Teslas): Bpk = (Vref x DuCy_max) / (Ns x 2.06E-6 x Freq)
Recommended Bpk_max = 0.200 T (2000 G)

Vitec Electronics Corporation
www.VitecCorp.com