

## RF PASSIVE COMPONENTS

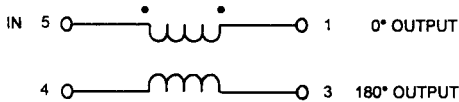
### DESCRIPTION

The CRT-102 is a wideband RF, subminiature surface mount, impedance transformer suitable for pick and place assembly.

This device offers low insertion loss with excellent phase and amplitude balance over a very broad bandwidth and is recommended for applications where these parameters are critical.

The FR-4 substrate makes this device highly suited to mounting on FR-4 board assemblies due to the matched coefficients of thermal expansion.

### FUNCTIONAL SCHEMATIC



### SPECIFICATIONS

PARAMETER	MIN.	TYP.	MAX.	UNITS
Frequency Range	5		1000	MHz
Impedance Ratio		1:1		
Temperature Range	-40		+85	°C
Insertion loss		0.6	1.00	dB
Amplitude Balance		±0.25	±1.00	dB
Phase Balance		±5	±10	Deg
Return Loss (Input)	11.7	17		dB

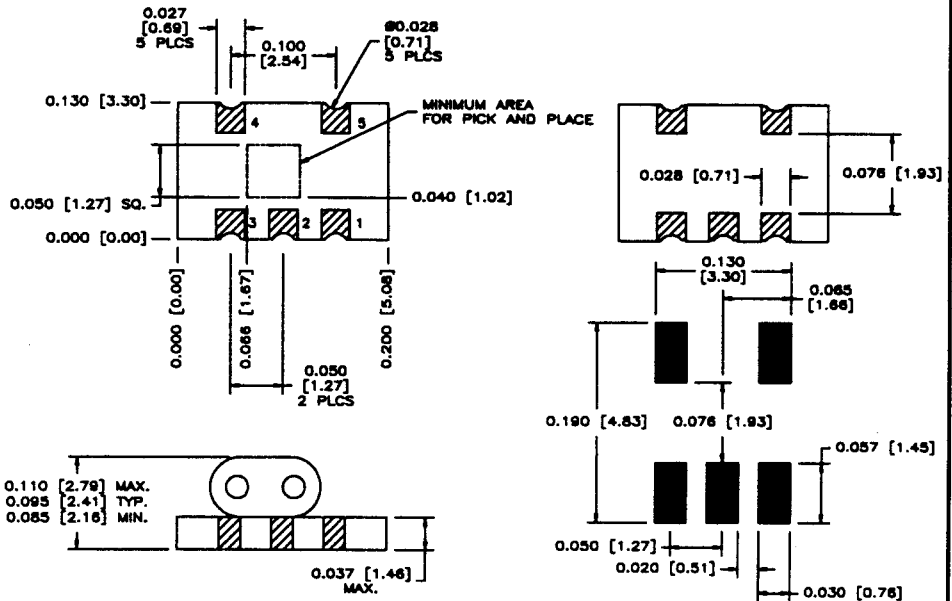
### PACKAGE

#### SUBSTRATE MATERIAL:

FR-4

Note: All half via contacts are plated through from the pad on the top side to the pad on the bottom side of the board.

ALL DIMENSIONS ARE IN INCHES [mm].



Pin	Function
1	0° Output
2	N/C
3	180° Output
4	Ground
5	Input

**TOLERANCES:**  
.XX = ±.01  
.XXX = ±.005

**Recommended Land Pattern**

Contact the factory for further information on tape and reel specifications and recommended reflow profiles.

1.17.00 Rev. A

VARI-L Company Inc. • 4895 Peoria Street • Denver, Colorado 80239

Phone: (303) 371-1560 • Fax: (303) 371-0845 • Email: sales@vari-l.com • Website: www.vari-l.com