

### DESCRIPTION

The TO series is a line of six TO-5 packaged transformers offering the most common configurations.

These transformers are high reliability devices designed to meet MIL-T-55631. Typical applications are: Interstage coupling, phase detection and pulse transformation.

### LIMITED WARRANTY

Vari-L Company, Inc. warrants its products against defects in parts and workmanship for a period of one year.

### GUARANTEED MINIMUM PERFORMANCE DATA SPECIFICATIONS FOR MODEL TO-230

Type: 50 ohm unbalanced 450 ohm unbalanced

| - 1 dB Bandwidth, MHz     | .5-100 |
|---------------------------|--------|
| Midband insertion loss dB | .75    |
| VSWR                      | 2.5:1  |

#### NOTE:

 1 dB bandwidth is measured relative to midband loss.

## ABSOLUTE MAXIMUM RATINGS:

Input power ↑ w. limited by (IDC2 + IRF2)Z ≅ Pmax. Temperature range - 54°C to + 100°C

# ENVIRONMENTAL CONDITIONS

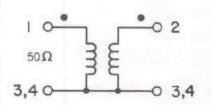
# GUARANTEED ENVIRONMENTAL PERFORMANCE:

All units are designed to meet their specifications over  $-54^{\circ}\text{C}$  to  $+100^{\circ}\text{C}$  and after exposure to any or all of the following tests per MIL-STD-202E.

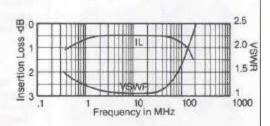
| Exposure<br>Thermal Shock<br>Altitude<br>H.F. Vibration       | 107D<br>105C<br>204C | Condition<br>B<br>G<br>D |
|---|----------------------|--------------------------|
| Mechanical Shock<br>Random Vibration<br>(15 minutes per axis) | 213B<br>214          | UF                       |
| Solderability<br>Terminal Strength<br>Resistance to           | 208C<br>211A         | С                        |
| Soldering Heat  | 210A                 | В                        |
|   |                      |                          |

Sealed units, meet the requirements of Method 106D of MIL-STD-202E when exposed to humidity.

### FUNCTIONAL SCHEMATIC



### TYPICAL PERFORMANCE



### PACKAGE

### MATERIAL:

Header & Leads: F15 Kovar per ASTM Standard F-15-68 Cover: Nickel 200 per ASTM B162-58T

#### FINISH:

Header & Leads: Gold per MIL-G-45204, Type I, Grade A, Class 1, over nickel per QQ-N-290, Class 1, Form SB Cover: Nickel 200 per ASTM B162-58T

