HYB-16 Wideband Non-transforming 180°, 3 dB Hybrid 1-200 MHz





### DESCRIPTION

The HYB-16 is a miniature flatpack, 3 dB hybrid where ports A-B and C-D are mutually isolated. This hybrid features very high isolation and outstanding amplitude and phase balance. All four ports have 50 ohms impedance.

## GUARANTEED MINIMUM PERFORMANCE DATA

Isolation Ports A-B (dB)	25
<ul> <li>1 dB Bandwidth, MHz</li> </ul>	1-200
Midband insertion loss dB	.5
Amplitude unbalance dB	.5
Phase unbalance*	3
VSWR (R = $50\Omega$ )	1.5
/	

#### **ABSOLUTE MAXIMUM RATINGS:**

Input power 1 w. Temperature range - 54°C to +100°C

# ENVIRONMENTAL CONDITIONS

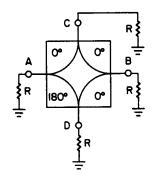
## GUARANTEED ENVIRONMENTAL PERFORMANCE:

All units are designed to meet their specifications over -54 °C to +100 °C and after exposure to any or all of the following tests per MIL-STD-202E.

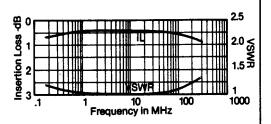
		Test
Exposure	Method	Condition
Thermal Shock	107D	В
Altitude	105C	G
H.F. Vibration	204C	D
Mechanical Shock	213B	С
Random Vibration (15 minutes per axis)	214	IIF
Solderability	208C	
Terminal Strength Resistance to	211A	С
Soldering Heat	210A	В

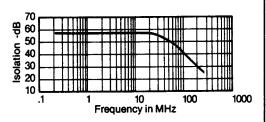
Sealed units, meet the requirements of Method 106D of MIL-STD-202E when exposed to humidity.

## **FUNCTIONAL SCHEMATIC**



## TYPICAL PERFORMANCE





## PACKAGE CASE MATERIAL:

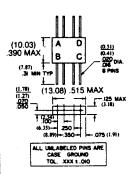
F15 Kovar per ASTM Standard F-15-68, (Chemical composition per MIL-STD-1276, Type K)

### FINISH:

Plating, all metal parts: gold per MIL-G-45204, Type I, Grade A, Class 1 over nickel per MIL-C-26074, Class 1

#### LEADS:

Kovar per MIL-STD-1276, Type K



Specifications subject to change without notice.