PS-2-1000F
Wide Band
In Phase
Two Way Hybrid
Combiner/Divider
5-1000 MHz

SIRENZA® MICRODEVICES

DESCRIPTION

A two-way in-phase hybrid power combiner/divider is a 180° hybrid power combiner/divider with the difference port (A) internally terminated.

As a two-way power divider, a signal fed into the input port yields two in-phase output signals 3 dB down from the input power.

As a two-way power combiner, signals applied to the output ports yeild a vector sum at the input port.

Multi-way binary power combiners/dividers are realized by cascading combinations of the basic two-way device. The power division ratio of the multi-way combiner/divider is 1/n.

GUARANTEED MINIMUM PERFORMANCE DATA

Isolation dB	20
– 1 dB Bandwidth, MHz	5-1000
Midband insertion loss dB	.50
Amplitude unbalance dB	.15
Phase unbalance°	3
VSWR	1.5

ABSOLUTE MAXIMUM RATINGS:

Input power 1 W (1/20 Watt Internal Load Dissipation)
Temperature Range – 54°C to + 100°C

ENVIRONMENTAL CONDITIONS

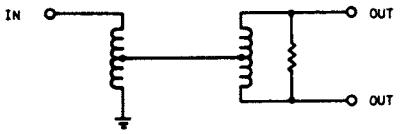
GUARANTEED ENVIRONMENTAL PERFORMANCE:

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

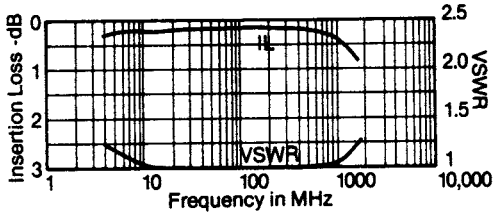
Exposure	Method	Test Condition
Thermal Shock	107D	B
Altitude	105C	G
H.F. Vibration	204C	D
Mechanical Shock	213B	C
Random Vibration (15 minutes per axis)	214	IIF
Solderability	208C	
Terminal Strength	211A	C
Resistance to Soldering Heat	210A	B

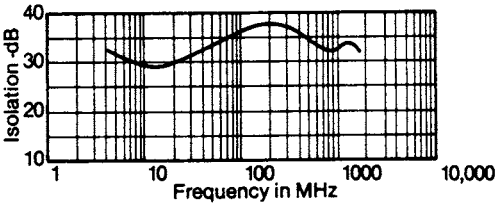
Sealed units, meet the requirements of Method 106D of MIL-STD-202E when exposed to humidity.

FUNCTIONAL SCHEMATIC



TYPICAL PERFORMANCE





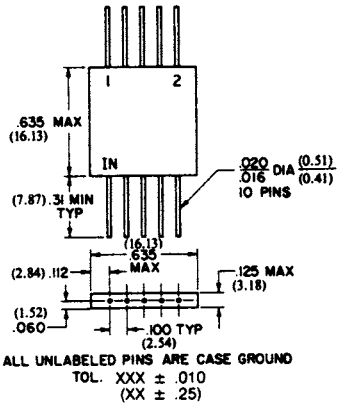
PACKAGE

MATERIAL:

F15 Kovar per ASTM Std. 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



Specifications subject to change without notice.

8.10.04 Rev. A