



WILKINSON POWER DIVIDER

DATA SHEET

PART SERIES: WPD02-1525EBF

SHEET 1 OF 4
Dwg 1016525ECO-073799
Revision A

FEATURES

Low Profile Surface Mount Package
Simplified Thermal Management
Power Dividing
Signal Combiner
ROHS Compliant

APPLICATIONS

Power Amplifiers
Antenna Feeds
Phased Array Radar
Satellites
Instrumentation

GENERAL DESCRIPTION

Smiths Interconnect offers high performance 2- and 4-Way Wilkinson power dividers ranging from DC to 50 GHz in a low profile, surface mount package. These devices are designed for demanding applications where excellent RF response and power handling are required.

ORDERING INFORMATION

Part Identifier: **WPD02-1525EBF**

SPECIFICATIONS

1.0 ELECTRICAL

Frequency:	15 – 25 GHz
Impedance:	50 Ω
Division:	2
Division Loss:	-3 dB Typical
Insertion Loss:	-0.5 dB max. 15 - 22 GHz, -0.75 dB max. 22 - 25 GHz
Isolation:	-20.0dB 15 - 22 GHz, -15.0dB 22 - 25 GHz
VSWR:	1.30:1 max.
Amplitude Balance:	± 0.2 dB 17 - 22 GHz, ± 0.2 dB 15 - 25 GHz
Phase Balance:	$\pm 3^\circ$ 17 - 22 GHz, $\pm 8^\circ$ 15 - 25 GHz
Power Handling:	1 Watt CW

2.0 ENVIRONMENTAL

Operating Temperature: -55°C to +150°C

3.0 MARKING

"B" size, Pin 1 dot Indicator

4.0 QUALITY ASSURANCE

Sample Inspect Per MIL-STD-105, Level II, 1.0% AQL.

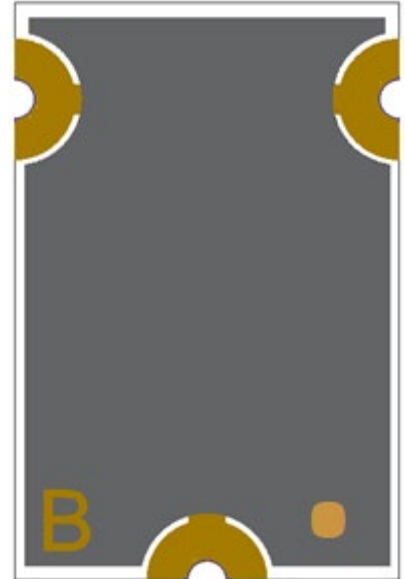
Visual and Mechanical Examination for Conformance to Outline Drawing Requirements.

Test Data Requirements

No Test Data Required
Data Retention – 12 months

5.0 PACKAGING

Standard: Waffle Pack



Note: Specifications are subject to change.



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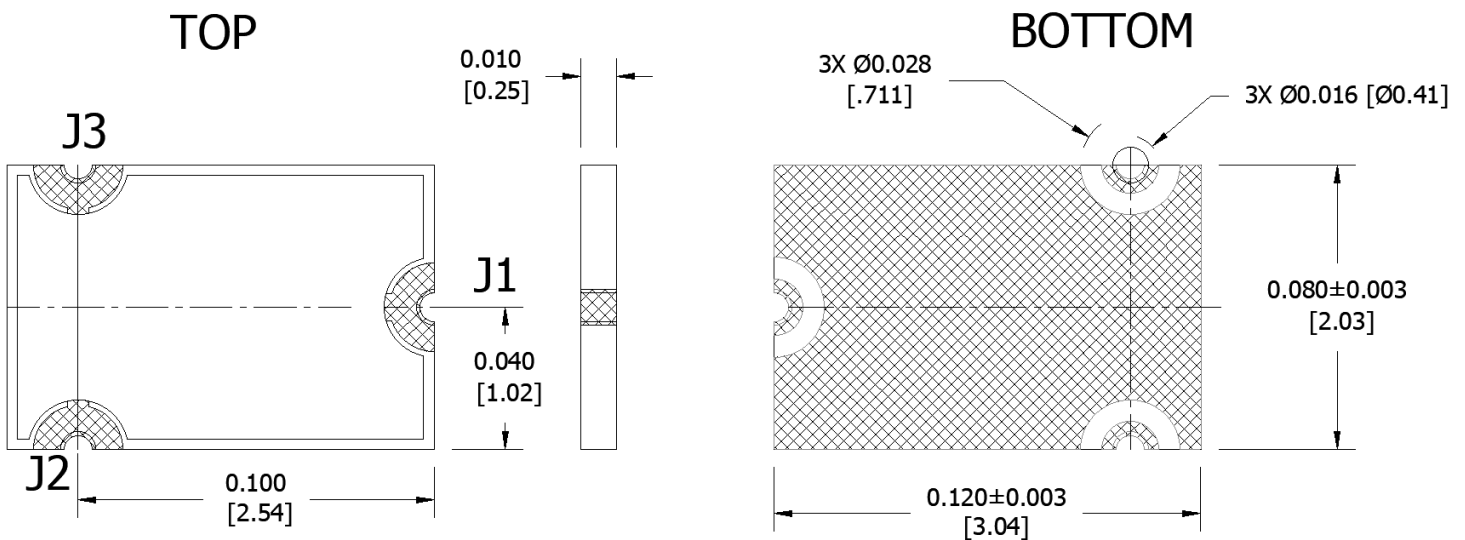
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6.0 MECHANICAL

Substrate Material: Alumina
Terminal Material: Thin film, gold
Resistive Material: Thin film, tantalum nitride

PIN CONFIGURATION

Port	DESCRIPTION
J1	INPUT
J2	- 3 dB Output
J3	- 3 dB Output



Unless Otherwise Specified: TOLERANCE: X.XX = ± 0.01 X.XXX = ± 0.001

Note: Specifications are subject to change.

Metric dimensions for Reference only.



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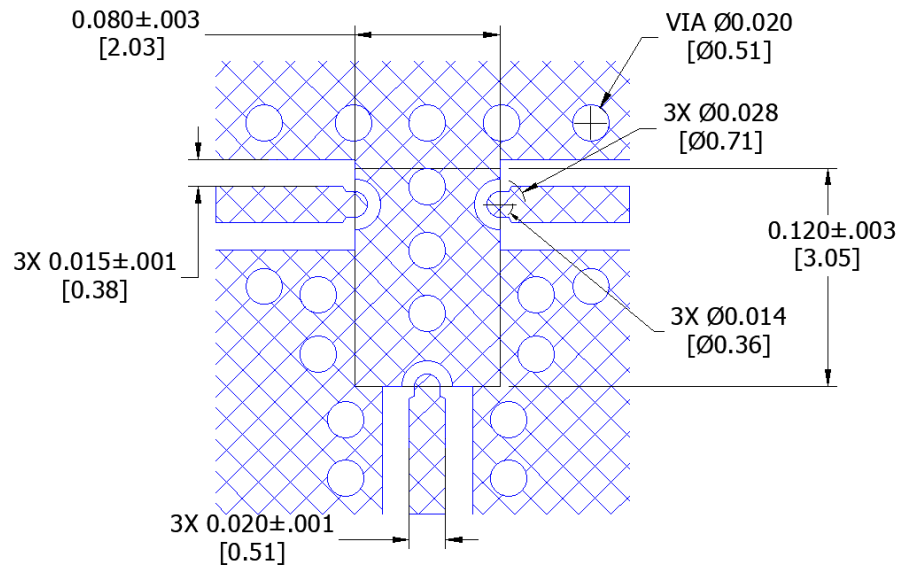
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7.0 SUGGESTED LAND PATTERN



Metric dimensions for Reference only.

Transmission line dimensions based on a Rogers 6035HTC substrate, 0.010" thick, 1/2oz. copper both sides.



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8.0 TYPICAL RF PERFORMANCE

