WILKINSON POWER DIVIDER

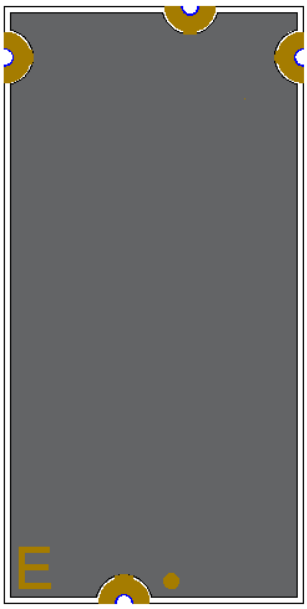
DATA SHEET **PART SERIES: WPD03-1525EEF** SHEET 1 OF 4 Dwg 1016835 ECO-080123 Revision A

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-, 3- 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: WPD03-1525EEF

SPECIFICATIONS

1.0 ELECTRICAL

Frequency:	15 – 25 GHz
Impedance:	50 Ω
Division:	3
Division Loss:	-4.8 dB Typical
Insertion Loss:	-0.5 dB for 15 - 22 GHz, -0.75 dB for 22 - 25 GHz
Isolation:	-20.0 dB for 15 - 22 GHz, -15.0 dB for 22 - 25 GHz
VSWR:	1.30:1 max.
Amplitude Balance:	± 0.25 dB for 17 - 22 GHz, ±0.5 dB for 22 - 25 GHz
Phase Balance:	± 3° for 15 - 22 GHz, ± 8° for 22 - 25 GHz
Power Handling:	1 Watt CW

2.0 ENVIRONMENTAL

Operating Temperature: -55ºC to +150ºC

3.0 MARKING

"E" 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.

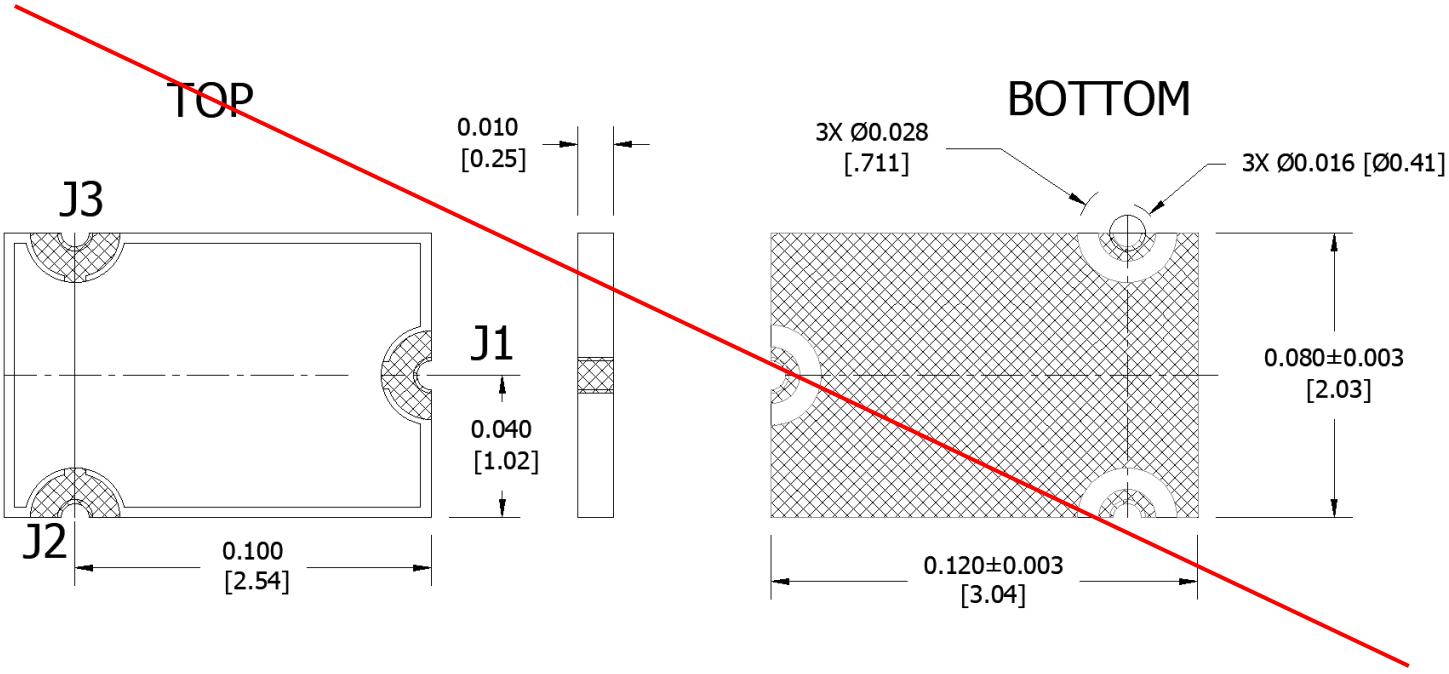
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6.0 MECHANICAL

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

PIN CONFIGURATION

Port	DESCRIPTION
J1	INPUT
J2	- 4.8 dB Output
J3	- 4.8 dB Output
J4	- 4.8 dB Output



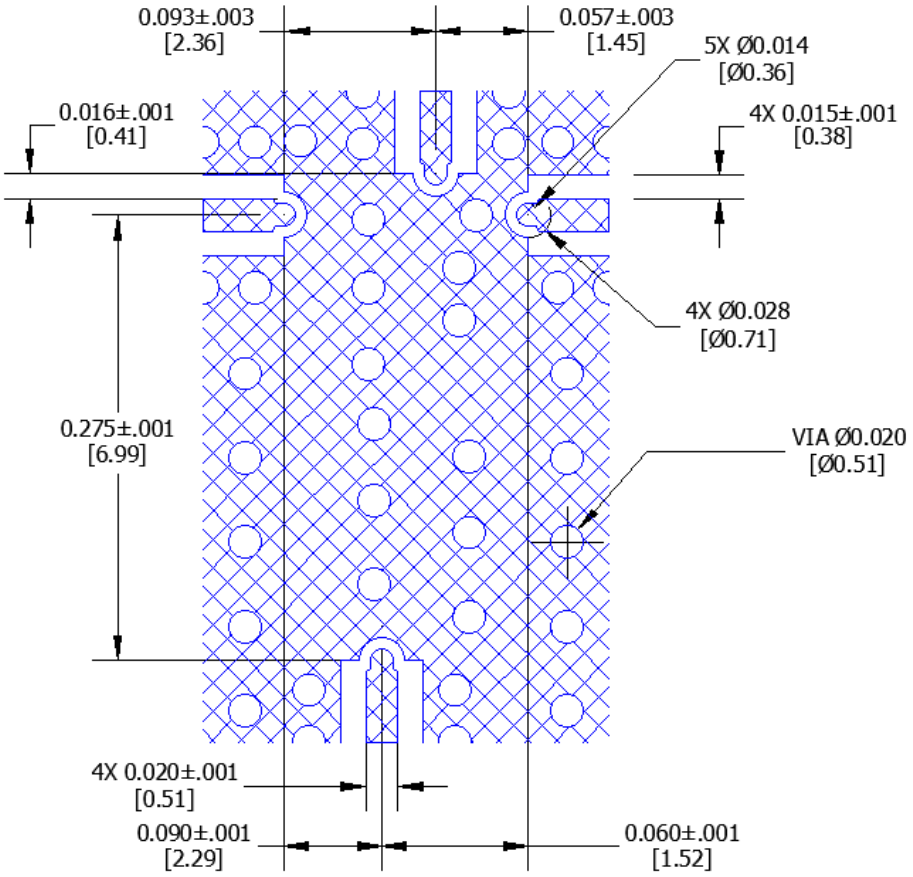
Unless Otherwise Specified: TOLERANCE: X.XX = ± 0.01 X.XXX = ± 0.001

Note: Specifications are subject to change.

Metric dimensions for Reference only.

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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

