

## Ultra-Wideband Power Divider 2-way N Female from 500 MHz to 8 GHz

### 2-way N Power Divider from 500 MHz to 8 GHz

### D-2085-N

#### Description

Werbel Microwave D-2085-N is a 2-way splitter that covers Cellular, PCS and Wi-Max bands. The operation frequency range is 500 MHz to 8 GHz. The product features low loss, high isolation and excellent VSWR. The product has tri-alloy plated brass N female connectors in a rugged aluminum case measuring 4.75 x 1.96 x 0.75 inches. The device is RoHS compliant.



Photo is representative.

Specifications	Min.	Typ.	Max.	Units
Frequency	500		8,000	MHz
Impedance		50		Ohm
Return Loss (Port S)	14	18		dB
Return Loss (Ports 1-2)	14	22		dB
Insertion Loss (above theoretical 3.01dB)			1.3	dB
Isolation (500-600MHz)	12.5			dB
(600-8000MHz)	16			dB
Amplitude Balance ( $\pm$ )			0.4	dB
Phase Balance ( $\pm$ )			6	Degrees
Input Power (CW) <sup>1</sup>			20	Watts
Internal Power Dissipation			1.5	Watts

#### Mechanical

Connector Interface	N-Female
Operating Temperature <sup>2</sup>	-55 to +85 °C
Storage Temperature	-55 to +100 °C
Weight Estimate	12.8 oz (363 g)
Humidity	10-90% non-condensing
Environment	Indoors Use Only

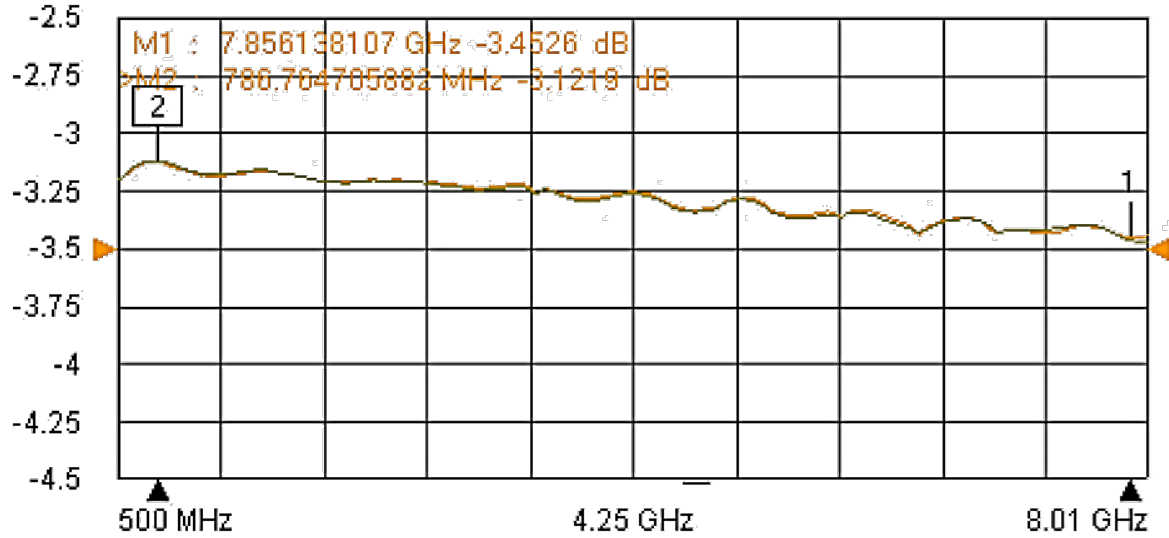
1. All output ports should be terminated in a 50-ohm load with 1.2:1 max VSWR.
2. Electrical specification at +25 °C only.
3. To the best of our knowledge at the time of publication.

#### Materials

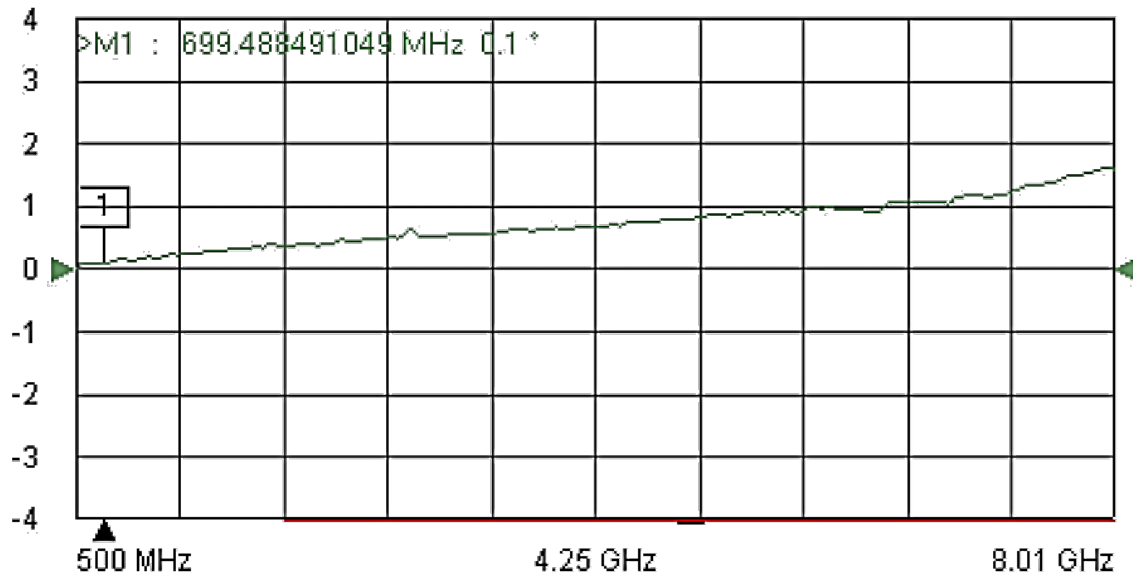
RoHS Compliant <sup>3</sup>	
Enclosure	Aluminum
Connectors	Brass, Tri-Alloy
Contacts	Be Cu, Gold Plated
Insulators	PTFE
Finish	Gray Paint

## Typical Performance at +25 °C

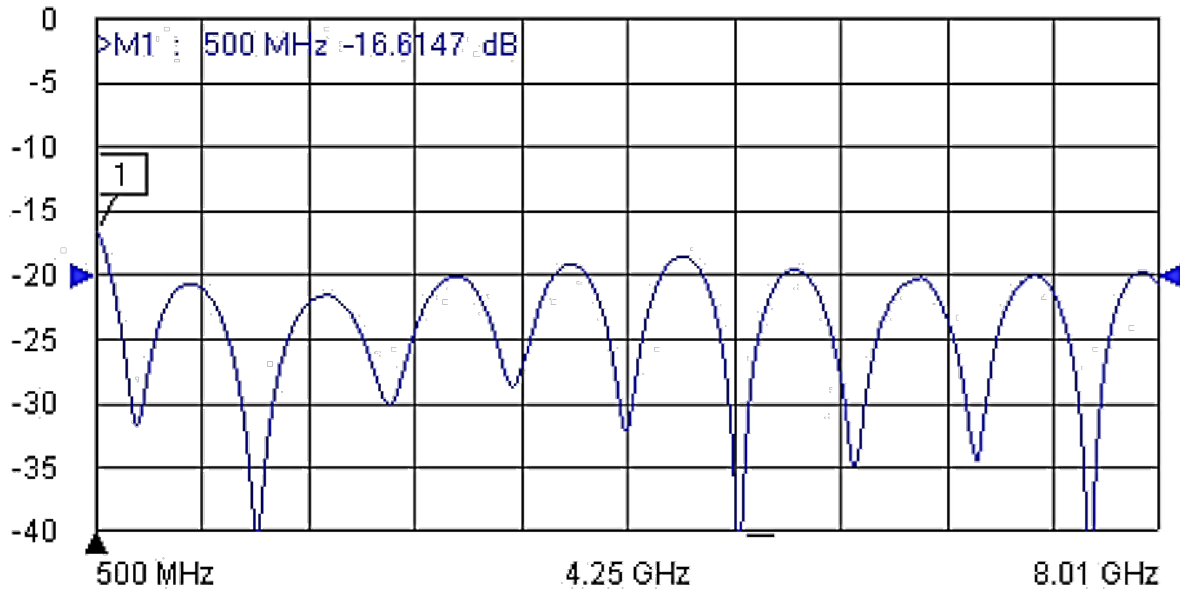
### Insertion Loss



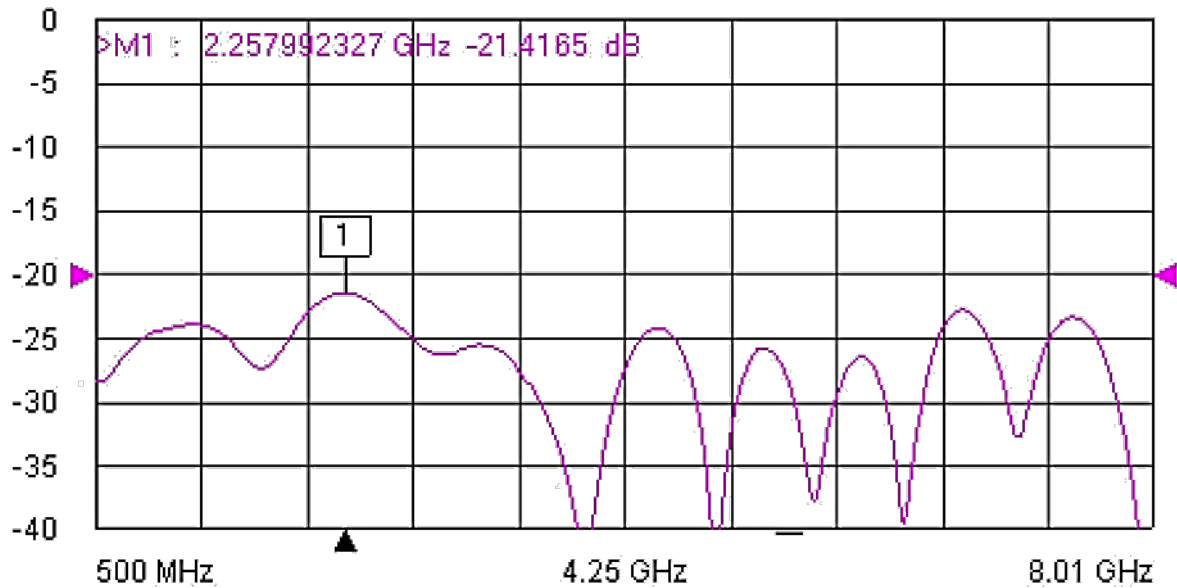
### Phase



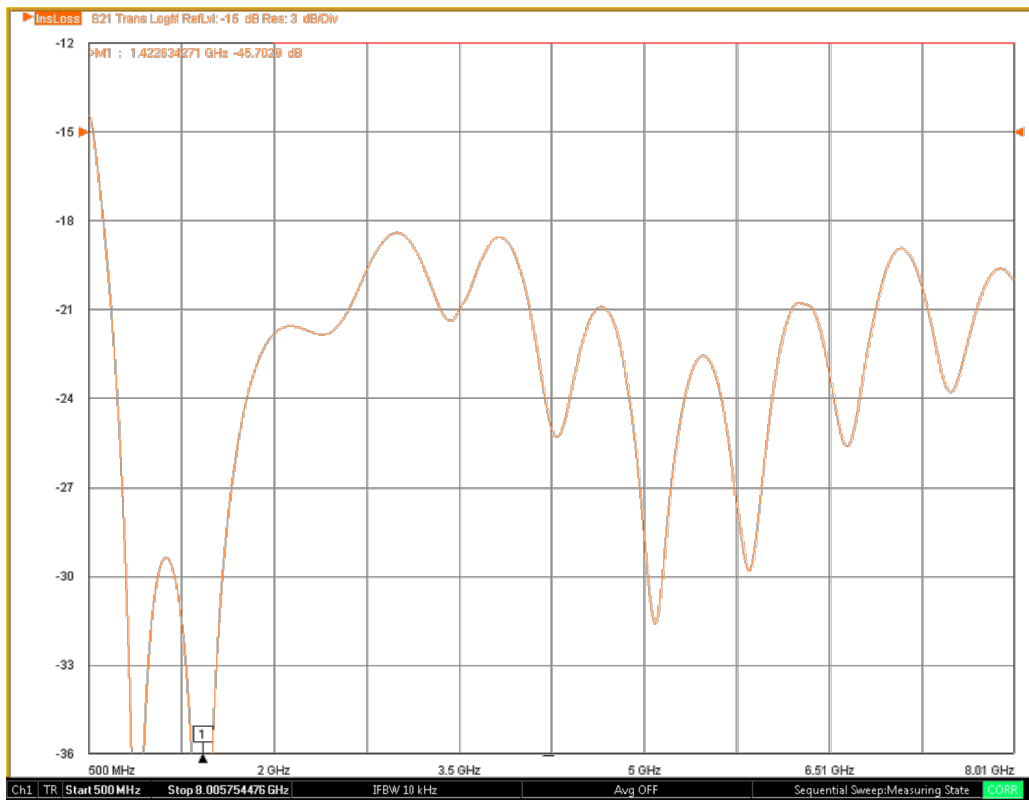
## Return Loss Input



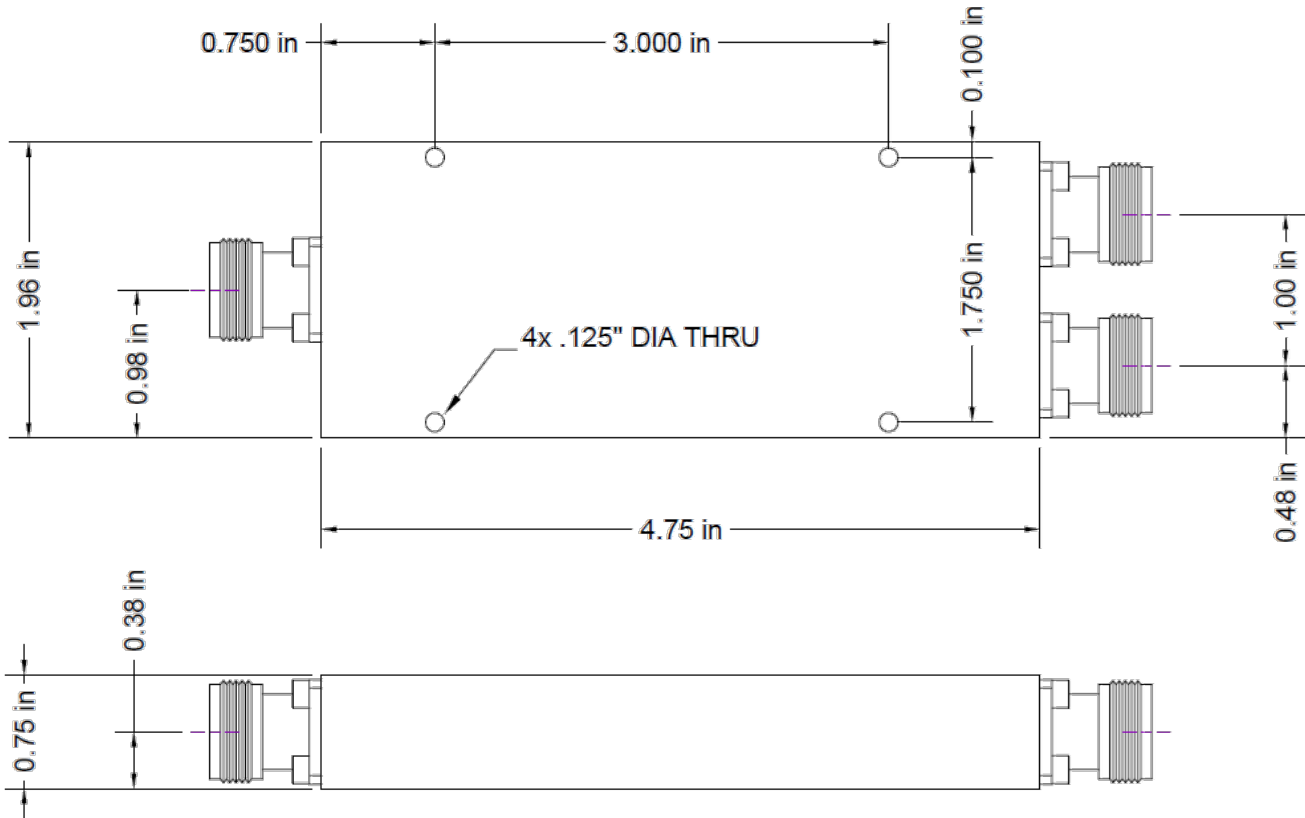
## Return Loss Output



## Isolation



## Outline Dimensions



Outline drawing: OL-2085-N

Dimensions are in inches, [mm] shown for convenience.

Tolerances on 2-pl decimals:  $\pm .03$ . 3-pl decimals:  $\pm .015$ .

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or documentation of the part, in order to implement improvements. Werbel Microwave LLC reserves the right to make such changes as required without notice. Unless otherwise stated, all specifications and dimensions are nominal. Werbel Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Werbel Microwave LLC does not assume any liability arising out of the use of any part of documentation. This document gives only a description of the product(s) and shall not form part of any contract. Please contact a Werbel Microwave LLC Applications Engineer for the most current specification drawing.