



LEAD-FREE / RoHS-COMPLIANT

DIRECTIONAL COUPLER

C17-0R506

The C17-0R506 is a high power, broadband bidirectional coupler capable of operation to 6 GHz. The multisection stripline design exhibits excellent coupling flatness and VSWR at all ports. This coupler is available with SMA and APC-7 connector option.

Features

- Low Insertion Loss
- High Power Handling
- Broadband Performance
- High Directivity
- Low VSWR
- [Microwave Power Dividers & Couplers App Note](#)

Electrical Specifications

Parameter ¹	Frequency Range (GHz)	Min	Typ	Max
Direct Line Insertion Loss (dB)	0.5		0.17	
	6		0.4	
Mean Coupling (dB)	0.5-6		17.5	1
Amplitude Flatness (dB) ²			±0.6	±1.2
VSWR			1.2	1.45
Directivity (dB)		15	20	
Average Power (W)				
Weight (g) ³			600	

¹Specifications guaranteed when operated in a 50Ω system.

²Deviation from average coupling.

³Weight listed is for SMA connectorized package. Each APC-7 connector is an additional 50 grams.

Model Number	Description
C17-0R506	0.5-6 GHz 17.5 dB Directional Coupler with SMA connectors ¹ LEAD-FREE/RoHS COMPLIANT

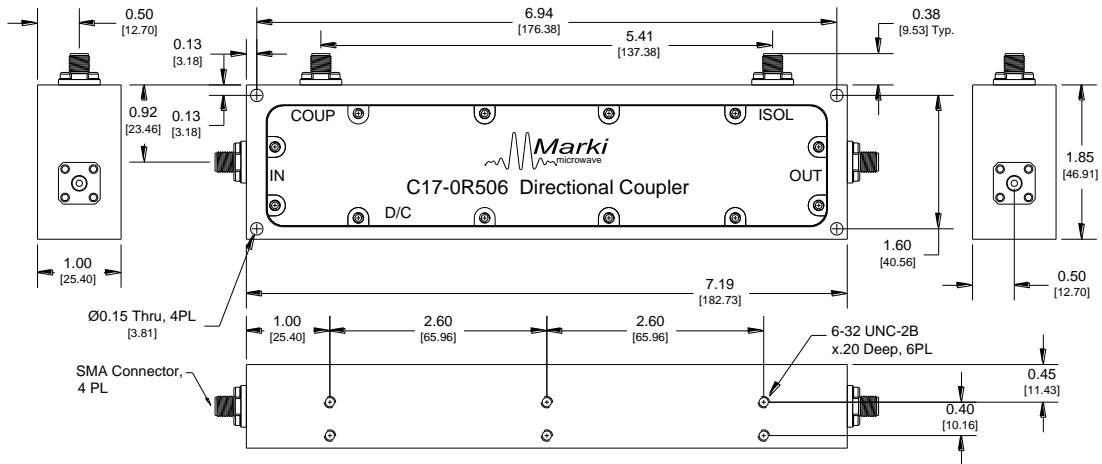
¹Default is SMA female connectors. Use suffix 'A' for APC-7 version. Consult factory for other connector options.

DIRECTIONAL COUPLER

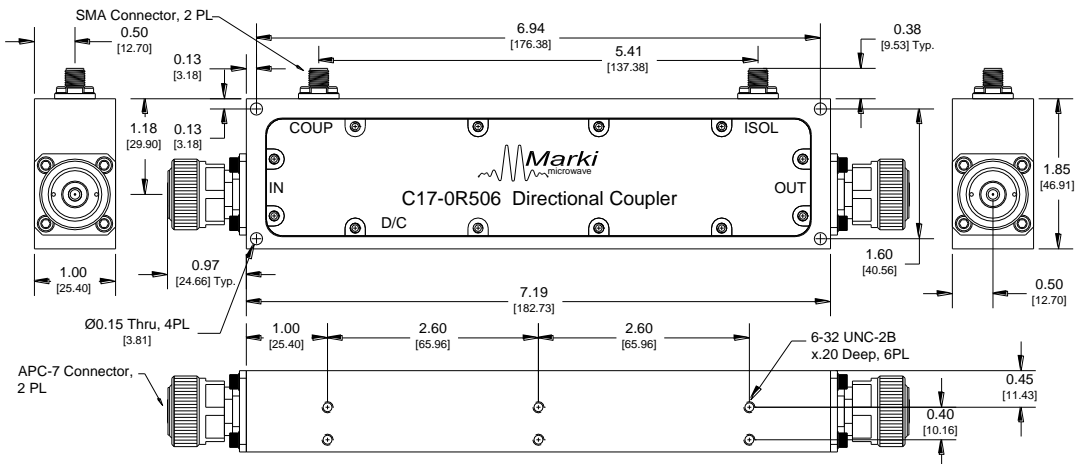
C17-0R506

Page 2

C17-0R506 Package Outline



C17-0R506A Package Outline



Typical Performance

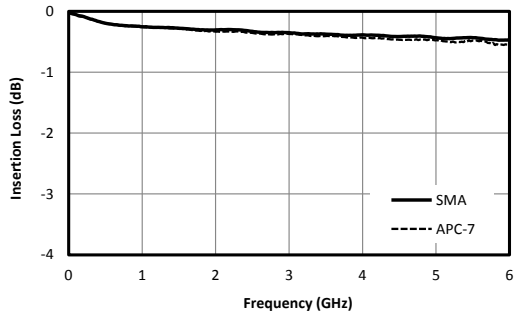


Fig. 1. Direct line insertion loss.

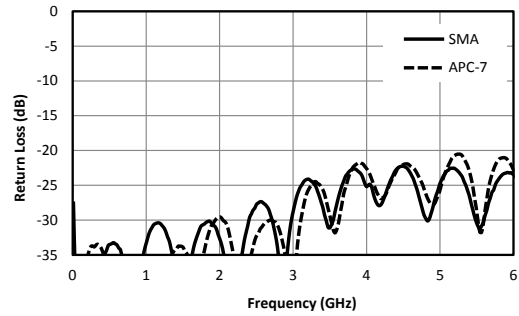


Fig. 2. Typical port return loss.

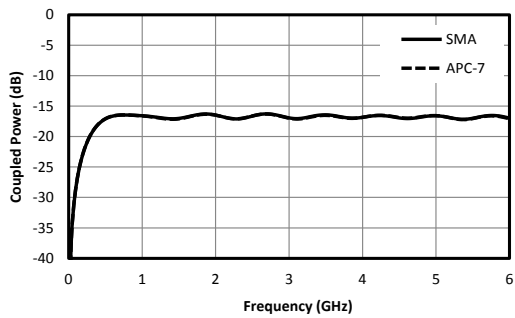


Fig. 3. Coupled port power.

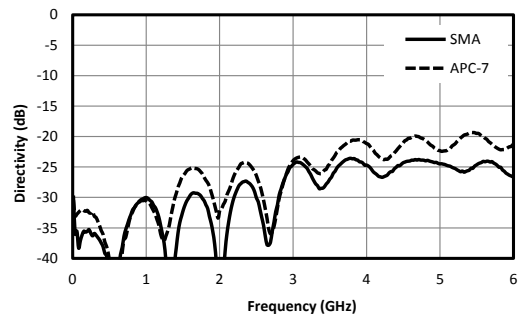


Fig. 4. Typical directivity.

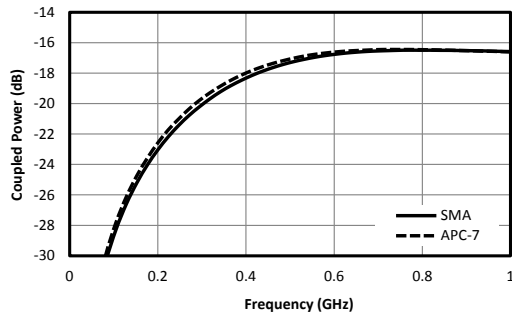


Fig. 5. Low frequency coupled port power

Marki Microwave reserves the right to make changes to the product(s) or information contained herein without notice. Marki Microwave makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does Marki Microwave assume any liability whatsoever arising out of the use of or application of any product.