

# **DIRECTIONAL COUPLER**

C09-0R412

The C09-0R412 is a broadband 0.45-12 GHz, 9 dB directional coupler. The multisection tri-plate stripline design exhibits excellent coupling flatness and VSWR at all ports. Custom designs are also available; contact the factory for details.

#### **Features**

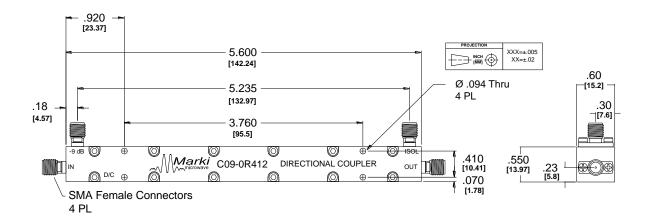
- Ultra Broadband Performance
- Excellent Coupling Flatness
- High Directivity
- Low VSWR
- Microwave Power Dividers & Couplers App Note



### **Electrical Specifications**

Parameter <sup>1</sup>	Frequency Range (GHz)	Min	Тур	Max
Mean Coupling (dB)			9	
Amplitude Flatness (dB) <sup>2</sup>			±0.7	±1.4
Direct Line Insertion Loss (dB)	0.45.40			1.8
VSWR	0.45-12		1.15	1.4
Directivity (dB)		15	22	
Weight (g)			90	

<sup>&</sup>lt;sup>1</sup>Specifications guaranteed when operated in a  $50\Omega$  system.



<sup>&</sup>lt;sup>2</sup>Deviation from average coupling.



# **DIRECTIONAL COUPLER**

C09-0R412

Page 2

### **Typical Performance**

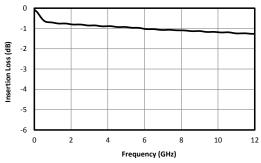


Fig. 1. Direct line insertion loss.

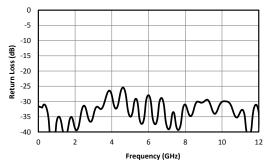


Fig. 2. Typical port return loss.

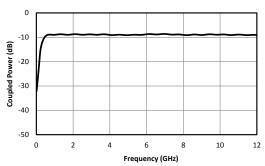


Fig. 3. Coupled port power.

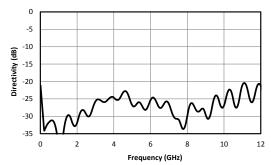


Fig. 4. Typical directivity.

Model Number	Description		
C09-0R412	0.45-12 GHz, 9 dB Directional Coupler with SMA connectors		

<sup>&</sup>lt;sup>1</sup>Default is SMA female connectors. Consult factory for other connector options.

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.



