

## DC-BLOCK

## DCZ(M/F)29(M/F)29

### Features

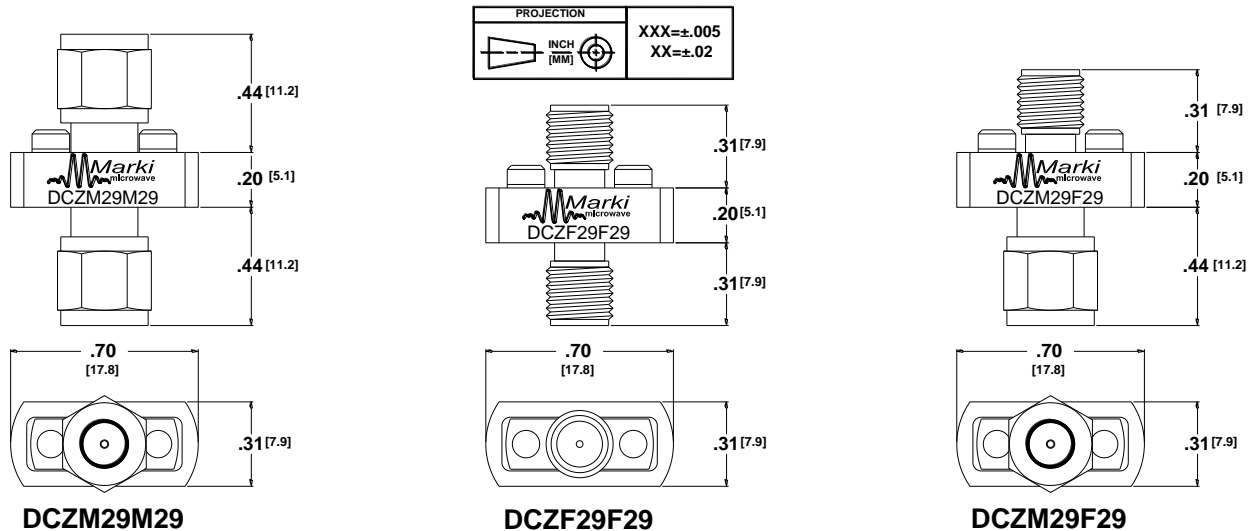
- 4 kHz to 40.0 GHz
- 2.92 mm Connectors
- Non-Resonant
- Low Insertion Loss
- Convenient easy-grip jacket for effortless loosening



**Electrical Specifications** - Specifications guaranteed from -55 to +100°C, measured in a 50-Ohm system.

Parameter	Frequency Range	Min	Typ	Max
Near DC Insertion Loss (dB)	2 kHz		3	
Insertion Loss (dB)	4 kHz to 40.0 GHz		.7	1.4
VSWR			1.4	
Capacitance (μF)			1	
Rise Time (ps) <sup>1</sup>			6	
Group Delay (ps)			75	
DC Voltage (V)				16
RF Power (W)				1

<sup>1</sup>Specified as 90%/10%. Calculated from  $\tau_{\text{balun}}^2 = (\tau_{\text{out}}^2 - \tau_{\text{in}}^2)$  with a 10 Gb/s input pattern.



### Part Number Options

Please specify package style by adding to model number.

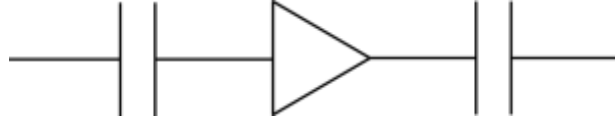
Package Style(s)	Example
DCZM29F29 (Male 2.92/Female 2.92) DCZM29M29 (Male 2.92/Male 2.92) DCZF29F29 (Female 2.92/Female 2.92)	DCZM29F29



**DC-BLOCK**  
 Page 2

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 4 kHz to 40.0 GHz

Application Schematic



The DC blocks isolate the DC components of waveforms while minimizing loss and group delay ripple.

Typical Performance

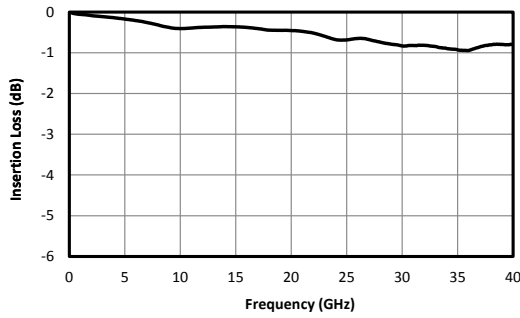


Figure 1. Insertion Loss

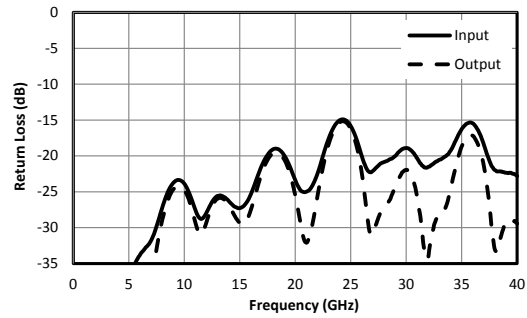


Figure 2. Return Loss

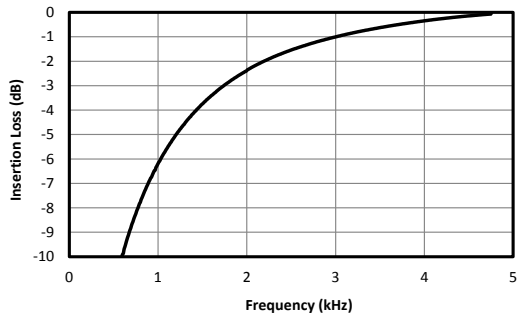


Figure 3. Near DC Insertion Loss

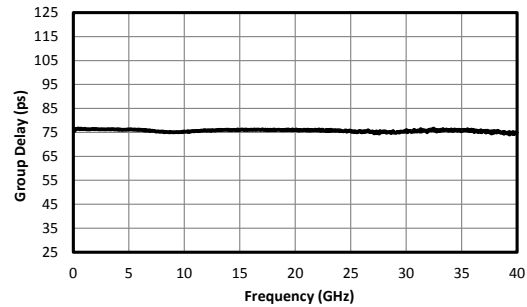


Figure 4. Group Delay

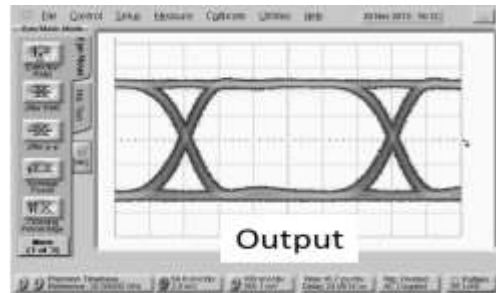
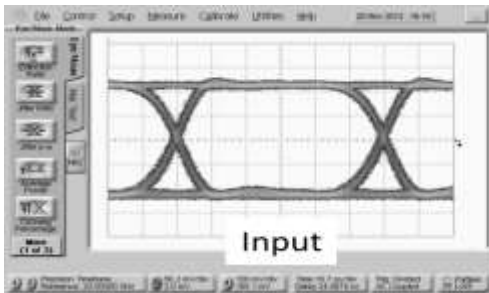


Fig. 5. Oscilloscope measurements of the DC block with a 10 Gb/s PRBS pattern. Eye diagrams are taken with a  $2^{31}-1$  PRBS input demonstrating minimal eye distortion/closure.

DATA SHEET NOTES:

1. Specifications are subject to change without notice. Contact Marki Microwave for the most recent specifications and data sheets.

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