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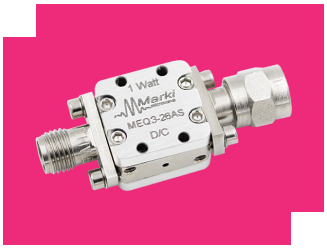
MEQ3-26AS

Passive GaAs MMIC 26.5 GHz Equalizer

DEVICE OVERVIEW

General Description

The MEQ3-26AS passive MMIC equalizer is an ideal solution for compensating for low pass filtering effects in RF/microwave and high speed digital systems. This equalizer provides positive slope from DC to 26.5 GHz with a DC attenuation value of 3 dB and a 50-ohm match maintained over the entire operating range. GaAs MMIC technology provides consistent unit-to-unit performance in a small, low cost form factor. Contact the factory for connectorized versions of our other MEQ products.



Download s-parameters here

Features

- DC attenuation of 3 dB
- Typical Insertion Loss 0.9 dB at 26.5 GHz
- Return loss: typical 20 dB over the entire band
- Bidirectional

Applications

- RF Transceivers
- High-Speed Data
- Telecom
- Cable Loss Compensation
- Amplifier Compensation

Functional Block Diagram

Part Ordering Options

Part Number	Description	Package	Connectors	Green Status	Product Lifecycle	Export Classification
MEQ3-26AS	Passive GaAs MMIC 26.5 GHz Equalizer	S	Standard	REACH RoHS	Released	EAR99

Table Of Contents

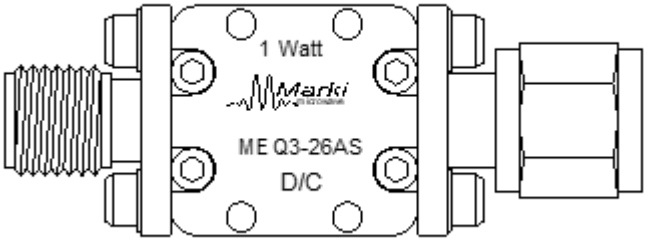
Revision History

Revision Code	Revision Date	Comment
-	2019-08-01	Datasheet Initial Release

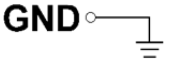
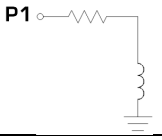
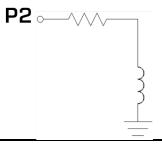
Port Configuration and Functions

Port Diagram

A top-down view of the MEQ3-26AS package outline drawing is shown below.



Port Functions

Port	Function	Connector Type	Description	Equivalent Circuit for Package
Pad	Ground	-	S package ground provided through metal housing and outer coax conductor.	
Port 1	Input/Output	SMAF	Port 1 is DC connected to ground through a resistor. DC block is required if voltage present.	
Port 2	Input/Output	SMAM	Port 2 is DC connected to ground through a resistor. DC block is required if voltage present.	

Specifications

Absolute Maximum Ratings

The Absolute Maximum Ratings indicate limits beyond which damage may occur to the device. If these limits are exceeded, the device may be inoperable or have a reduced lifetime.

Parameter	Maximum Rating	Unit
Maximum Operating Temperature	100	°C
Maximum Storage Temperature	125	°C
Minimum Operating Temperature	-55	°C
Minimum Storage Temperature	-65	°C
Port 1 DC Current	40	mA
Port 2 DC Current	40	mA
Power Handling, at any Port	30	dBm

Package Information

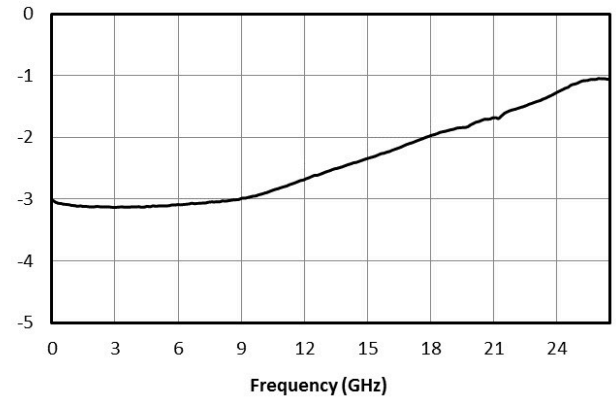
Parameter	Details	Rating
ESD	250 to < 500 Volts	HBM Class 1A
Weight	Package name: S	11.5g
Dimensions	-	14.22 x 13.21 mm

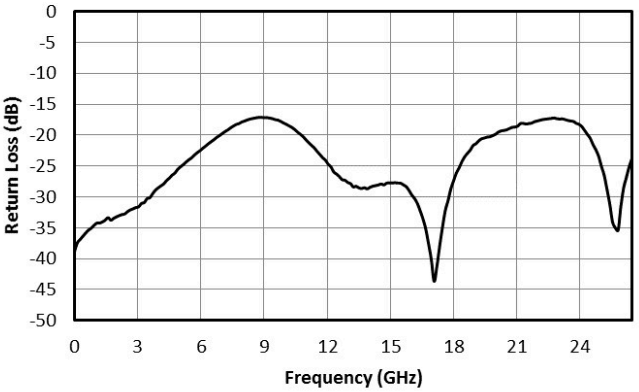
Electrical Specifications

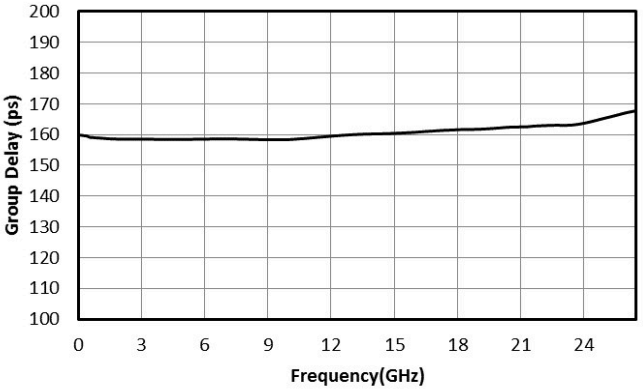
The electrical specifications apply at TA=+25°C in a 50Ω system. Typical data shown is for the equalizer in a S package with a sine wave input applied to port 1. Min and Max limits are guaranteed at TA=+25°C.

Parameter	Test Conditions	Minimum Frequency (GHz)	Maximum Frequency (GHz)	Min	Typ	Max	Unit
Impedance	-	-	-	-	50	-	Ω
Insertion Loss	-	10	10	-	2.9	-	dB
Insertion Loss	-	18	18	-	2	-	dB
Insertion Loss	-	26.5	26.5	-	1	2.5	dB
Insertion Loss at DC	-	0	0	-	3	-	dB
Return Loss	-	0	26.5	14	18	-	dB

Typical Performance Plots





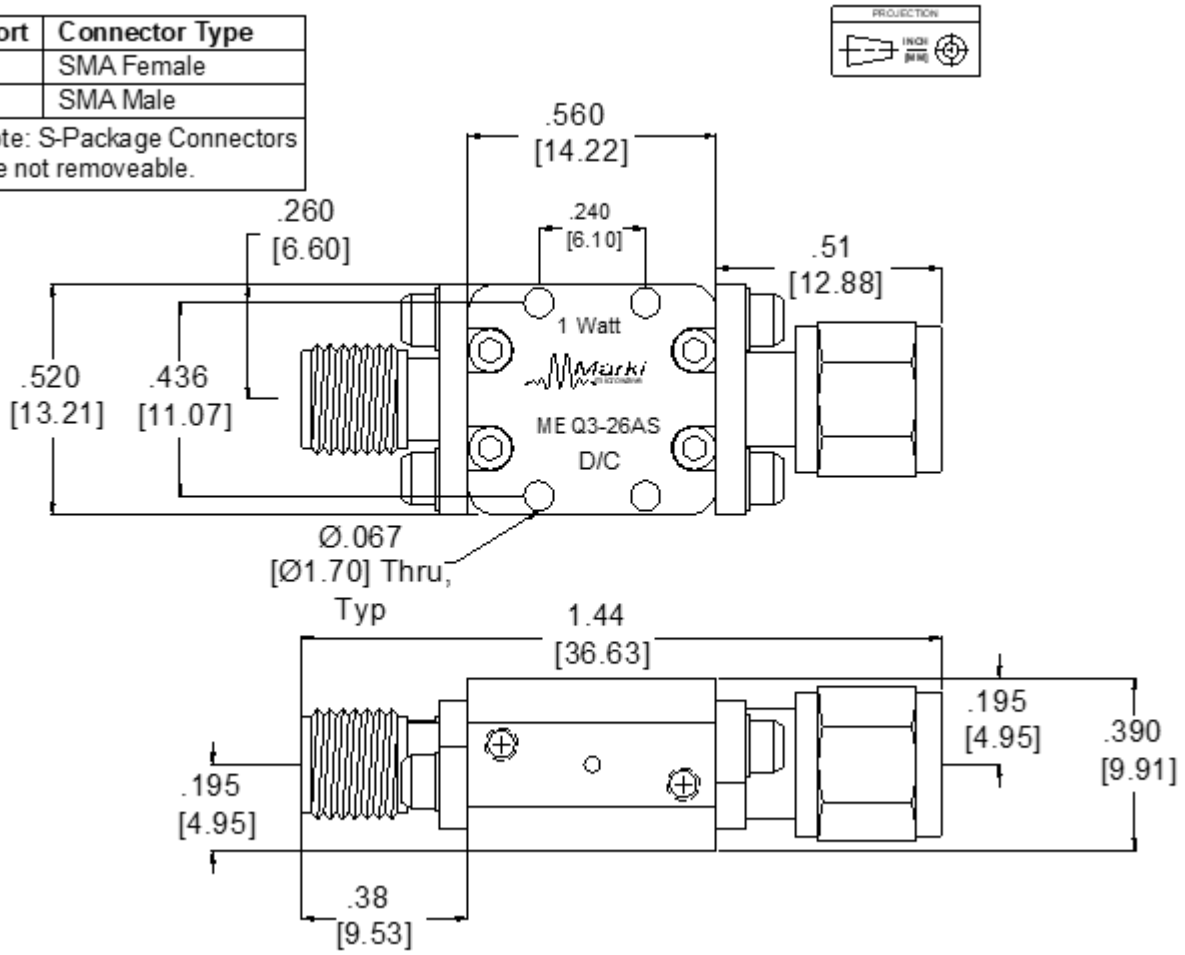


Mechanical Data

Outline Drawing

Download : Outline 2D Drawing | Outline 3D Drawing | Outline 3D STP

Port	Connector Type
1	SMA Female
2	SMA Male
Note: S-Package Connectors are not removeable.	



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