

## Typical Characteristics ON EQL-DC20-10-SFM

EQL-DC20-10-SFM IS A DC TO 20 GHz PASSIVE EQUALIZER WITH A 10 dB TYP. LOSS AT DC WITH A INSERTION LOSS OF 1.5 dB TYP. AT 20 GHz. THE EQUALIZER DESIGN ALLOWS BOTH FORWARD AND REVERSE MEASUREMENT TO BE EQUIVALENT.



**April 24, 2023**

**Designed By:  
Engineering PMI**

**Drawings By:  
J. Escano**

**Tested and Reported By:  
Keith Wagaman & Y Li**

# Typical Characteristics ON EQL-DC20-10-SFM

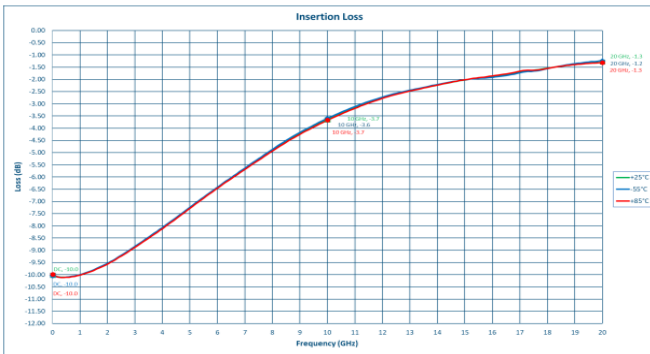
## Outline Drawing

**DESCRIPTION:**

EQL-DC20-10-SFM IS A DC TO 20 GHz PASSIVE EQUALIZER WITH A 10 dB TYP. LOSS AT DC WITH AN INSERTION LOSS OF 1.5 dB TYP. AT 20 GHz. THE EQUALIZER DESIGN ALLOWS BOTH FORWARD AND REVERSE MEASUREMENT TO BE EQUIVALENT.

**SPECIFICATIONS:**

- FREQUENCY RANGE:..... DC TO 20 GHz
- INSERTION LOSS:..... 10.0 dB @ DC TYP.  
1.5 dB @ 20 GHz TYP.
- VSWR:..... 1.8:1 TYP.  
2.0: MAX
- NOMINAL SLOPE:..... SEE PLOT
- WEIGHT:..... 1.0 oz MAX
- CONNECTORS:..... SMA FEMALE/MALE REMOVEABLE
- FINISH:..... GOLD PLATED



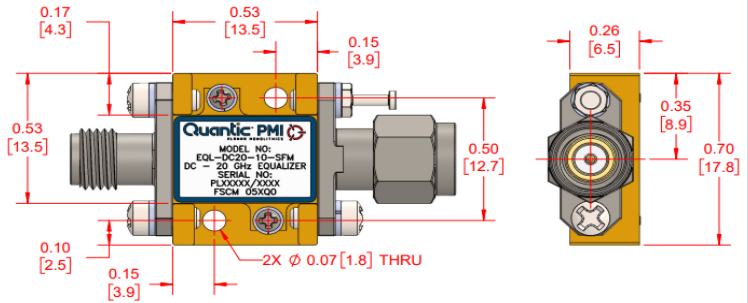
**ENVIRONMENTAL RATINGS:**

- TEMPERATURE:..... -55°C TO +85°C (OPERATING)  
-65°C TO +125°C (STORAGE)
- HUMIDITY:..... MIL-STD-202, METHOD 103B COND. B
- SHOCK:..... MIL-STD-202, METHOD 213B COND. B
- VIBRATION:..... MIL-STD-202, METHOD 204D COND. B
- ALTITUDE:..... MIL-STD-202, METHOD 105C COND. B
- TEMPERATURE CYCLE:..... MIL-STD-202, METHOD 107D COND. A

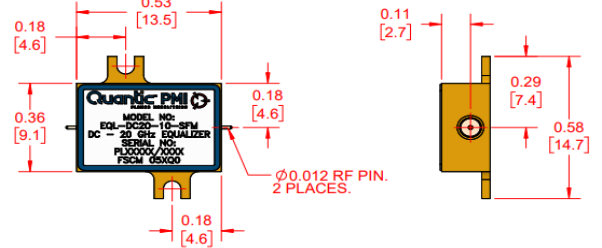
NOTE: SPECIFICATIONS WILL VARY OVER TEMPERATURE  
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

ZONE	REV	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	3/17/2022	

**HOUSING WITH CARRIER**



**HOUSING WITHOUT CARRIER (SURFACE MOUNT)**



PMI CONFIDENTIAL AND PROPRIETARY

APPROVALS		DATE	TITLE	
DESIGNER	J. ESCANO	3/17/2022	OUTLINE	
ISSUED			SIZE	FRONT NO.
			B	05XG0
			DRAW NO.	26945940
			REV	A1
			SCALE	3:1
				SHEET 1 OF 1

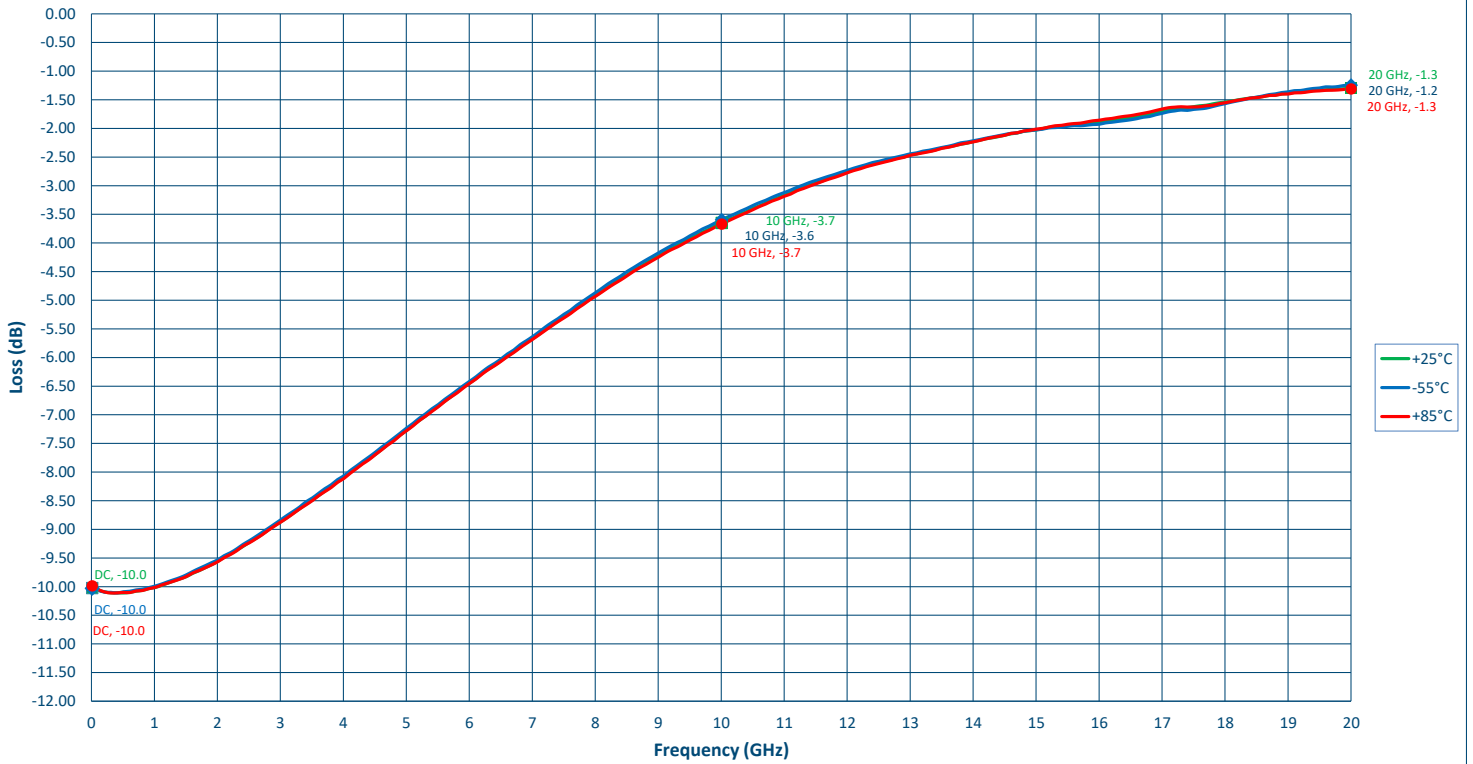
## Typical Characteristics ON EQL-DC20-10-SFM

### Test Data

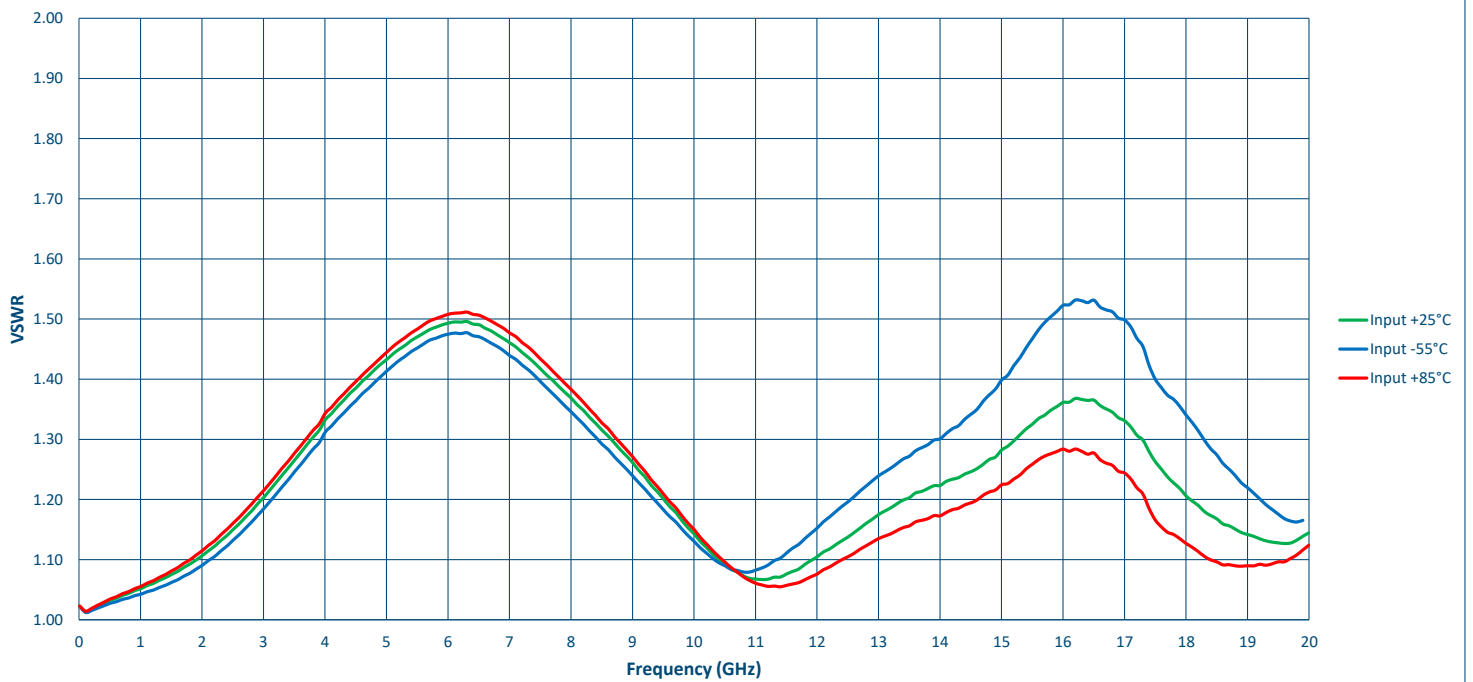
TEST ITEM NO.	PARAMETERS	SPECIFIED VALUE	Test Results		
			+25°C	-55°C	+85°C
1	Frequency Range:	DC to 20GHz	DC to 20GHz	DC to 20GHz	DC to 20GHz
2	Insertion Loss	10 dB @ DC Typ. 1.5 dB @ 20GHz Typ.	10.02 dB See Graph	10.03 dB See Graph	9.98 dB See Graph
			1.29 dB See Graph	1.24 dB See Graph	1.31 dB See Graph
3	VSWR (in/out)	1.8:1 Typ. 2.0:1 Max.	1.5 :1 Input See Graph	1.53 :1 Input See Graph	1.51 :1 Input See Graph
			1.48 :1 Output See Graph	1.55 :1 Output See Graph	1.49 :1 Output See Graph
4	Nominal Slope	See Plot in Outline	Pass	Pass	Pass

# Typical Characteristics ON EQL-DC20-10-SFM

Insertion Loss



INPUT VSWR



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