

## DESCRIPTION

PMI MODEL: LM-10M50G-18DBM-4W-24FF IS A HIGH POWER LIMITER THAT OPERATES OVER THE 10MHz TO 50.0 GHz FREQUENCY RANGE. THIS MODEL IS CAPABLE OF HANDLING AN INPUT POWER OF 4 WATTS CW & 20 WATTS PEAK, PULSE WIDTH 1 $\mu$ S TO 10 $\mu$ s, 1% DUTY CYCLE, THIS LIMITER USES 2.40 FEMALE CONNECTORS.

## SPECIFICATIONS

- FREQUENCY RANGE: ----- 10MHz TO 50.0 GHz
- POWER HANDLING: ----- 4 Watts CW Max. (\*See Note 1)
- PEAK INPUT POWER: ----- 20 Watts Max. (\*See Note 2)  
(Pw 1 $\mu$ s, 1% Duty Cycle) Tested up to 18GHz  
(Pw 10 $\mu$ s, 1% Duty Cycle) Tested up to 8GHz  
16 Watts Max. at 18GHz (Pw 10 $\mu$ s, 1% Duty Cycle)
- RECOVERY TIME: ----- 100 ns Typ.
- INSERTION LOSS @ -10 dBm Input Power: 10MHz to 18 GHz = 1.50 dB Max.  
- 18 to 40 GHz = 2.20 dB Max.  
40 to 50 GHz = 3.40 dB Max
- VSWR In/ Out @ -10 dBm Input Power: --- 2.0:1 Max.
- FLAT LEAKAGE POWER: ----- +18 dBm Typ.
- P1dB: ----- +15 dBm Typ.
- CONNECTORS: ----- 2.40 FEMALE.
- FINISH: ----- GOLD PLATED

### \* Note 1:

4 Watts at 18GHz, 5Watts to 12GHz, +20dBm to 40GHz (May Limit for High Power), May Handle +20dBm or more to 50Ghz But no Test Equipment is available.

### \*Note 2:

No Peak Power testing was performed beyond 18GHz, Theoretically the limiter should handle 15 Watts Typically 1 $\mu$ s PW, 1% Duty Cycle for Frequency Range 18GHz to 50GHz

## ENVIRONMENTAL RATINGS

- TEMPERATURE: ----- -55 °C TO +85 °C (OPERATING)  
-65 °C TO +125 °C (NON-OPERATING)
- 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 CYCLING: ----- MIL-STD-202, METHOD 107A COND. A

NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE

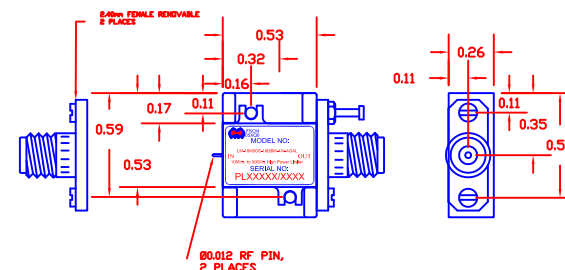
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

**PMI CONFIDENTIAL AND PROPRIETARY**

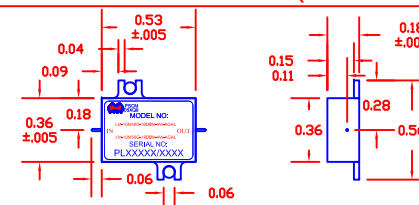
REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	7/31/20	ALB

## MECHANICAL OUTLINE

### HOUSING WITH CARRIER



### HOUSING WITHOUT CARRIER (SURFACE MOUNT)



ALL DIMENSIONS  
ARE IN INCH [mm]  
TOLERANCES:  
X.XX ± 0.020 [0.508]  
X.XXX ± 0.010 [0.254]

## PLANAR MONOLITHICS INDUSTRIES, INC.

7311-F GROVE ROAD

FREDERICK, MARYLAND 21704 USA

TEL: (301)-662-5019, FAX: (301)-662-1731

WEB: www.pmi-rf.com, EMAIL: sales@pmi-rf.com

ISO 9001 CERTIFIED



APPROVALS		DATE		TITLE	
DRAWN		7/20/20		PRODUCT FEATURE	
REDAWN				LM-10M50G-18DBM-4W-24FF	
ISSUED				10MHz to 50.0 GHz High Power Limiter	
SIZE		FSCM NO.		DWG NO.	
A		05XQ0		PRELIMINARY	
SCALE		N:S		SHEET	
				1 OF 1	