



Typical Characteristics On LM-0518-10-1W-SHS-1-F

PL13209/1320

**PMI MODEL: LM-0518-10-1W-SHS-1-F IS A HIGH SPEED,
HIGH POWER HARD DIODE-LIMITER. IT OPERATES
OVER THE FREQUENCY RANGE OF 0.5 TO 18GHz**



May 21, 2013

**DESIGNED BY:
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**TESTED & REPORTED BY:
HUGO GONZALES /SEBASTIAN PALACIO**



Typical Characteristics On LM-0518-10-1W-SHS-1-F

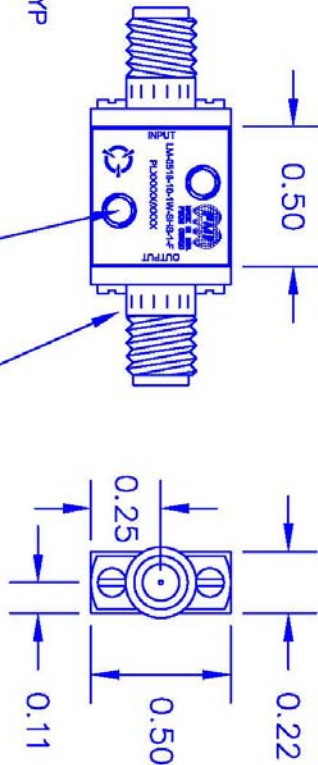
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DESCRIPTION

PMI MODEL: LM-0518-10-1W-SHS-1-F IS A HIGH SPEED, HIGH POWER HARD DIODE-LIMITER. IT OPERATES OVER THE FREQUENCY RANGE OF 0.5 TO 18GHZ

SPECIFICATIONS

- FREQUENCY RANGE:..... 0.5 TO 18 GHZ
- INSERTION LOSS @-20dBm INPUT:..... 2.0dB MAX, 1.5dB TYP
- VSWR @-20dBm INPUT:..... 2.0:1 MAX, 1.5:1 TYP
- LEAKAGE @ 1 WATT CW INPUT:..... +14dBm MAX, +10dBm TYP
- SPEED:..... 10ns
- INPUT POWER:..... 1 WATT CW, 100 WATTS PEAK, 1us PULSE, 0.1% DUTY CYCLE DERATED TO 20% AT 125°C
- LIMITING THRESHOLD:..... +10dBm TYP
- CONNECTORS:..... SMA FEMALE
- FINISH:..... PAINTED GRAY
- SIZE:..... 0.5" X 0.5" X 0.22"



ENVIRONMENTAL RATINGS

- TEMPERATURE:.....-54°C TO +85°C (OPERATING)
-65°C TO +125°C (STORAGE)
- HUMIDITY:..... MIL-STD-202F, METHOD 103B COND. B
- SHOCK:..... MIL-STD-202F, METHOD 213B COND. B
- VIBRATION:..... MIL-STD-202F, METHOD 204D COND. B
- ALTITUDE:..... MIL-STD-202F, METHOD 105C COND. B
- TEMPERATURE CYCLES:..... MIL-STD-202F, METHOD 107D COND. A

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

ZONE		REVISIONS	
REV.	DESCRIPTION	DATE	APPROVED
A	ORIGINAL RELEASE	07/14/18	
B	UPDATED TITLE BLOCK	08/17/18	

ALL DIMENSIONS ARE IN INCHES
TOLERANCES:
X.XX ±.0050
X.XX ±.0010
WEIGHT: X.XX GR.

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APPROVALS

DATE: 07/14/18

TITLE: PRODUCT FEATURE

LM-0518-10-1W-SHS-1-F

SIZE / PROJ. NO.	REV. NO.	DATE	REV.
A / 05X00	27010982		B
ISSUED	ISSUED	ISSUED	ISSUED
			1 OF 1

PMI CONFIDENTIAL AND PROPRIETARY



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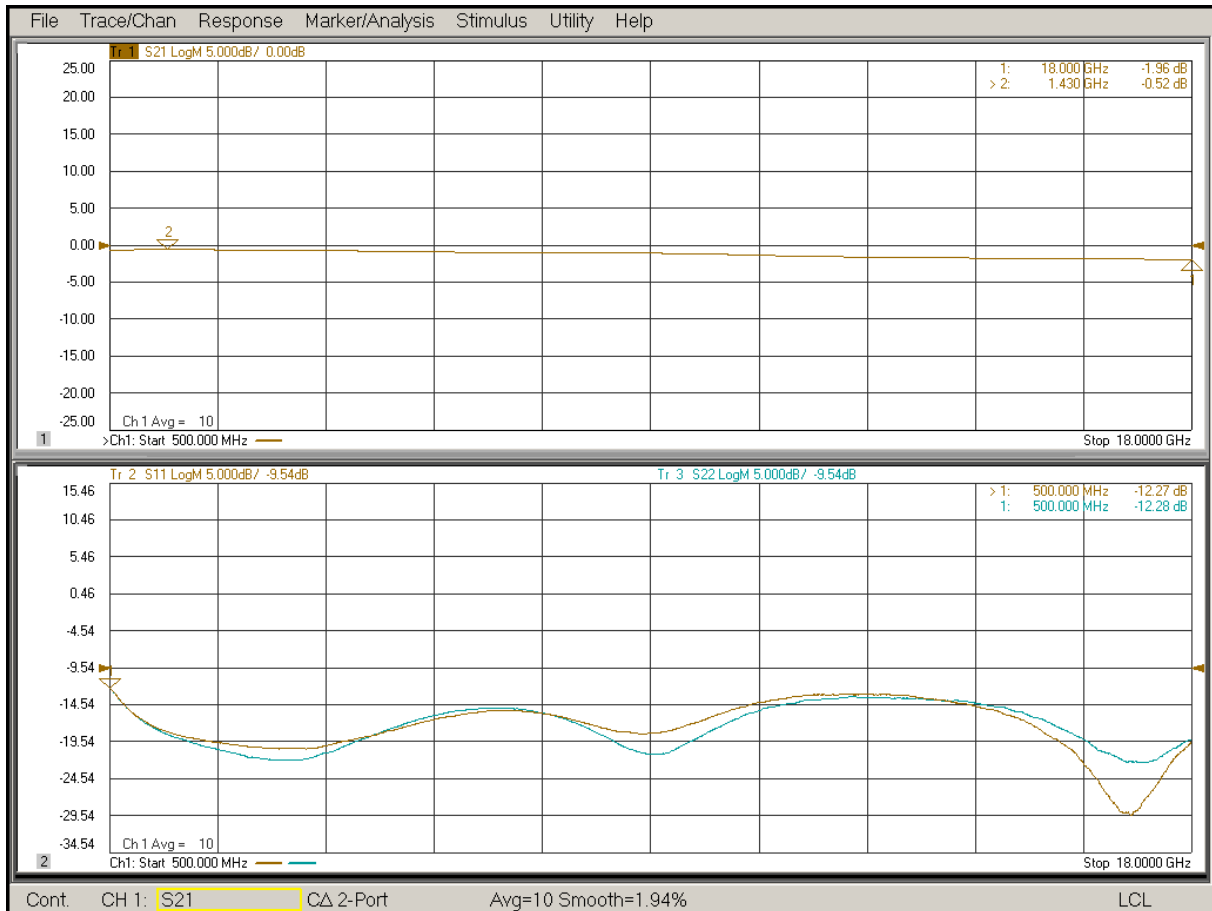
TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
1	Frequency Range:	0.5 GHz TO 18GHz	0.5 GHz TO 18GHz See Plot	
2	Insertion Loss @ -20dBm Input:	2.0 dB Max 1.5 dB Typ.	1.96dB See Plot	
3	VSWR @ -20dBm Input:	2.0:1 Max 1.5:1 Typ.	Input 1.65:1 Output 1.66:1 See Plot	
4	Leakage @ 1 Watt CW Input:	+14dBm Max +10dBm Typ.	+12.8dBm Max. See Graph	
5	Speed:	10ns	<10ns See Plots	
6	Input Power:	1 Watt CW, 100 Watts Peak, 1us Pulse, 0.1% Duty Cycle, Derated to 20% @ 125°C	Pass	
7	Limiting Threshold:	+10dBm Typ.	+5dBm Typ. See Graph	



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Insertion Loss & Return Loss

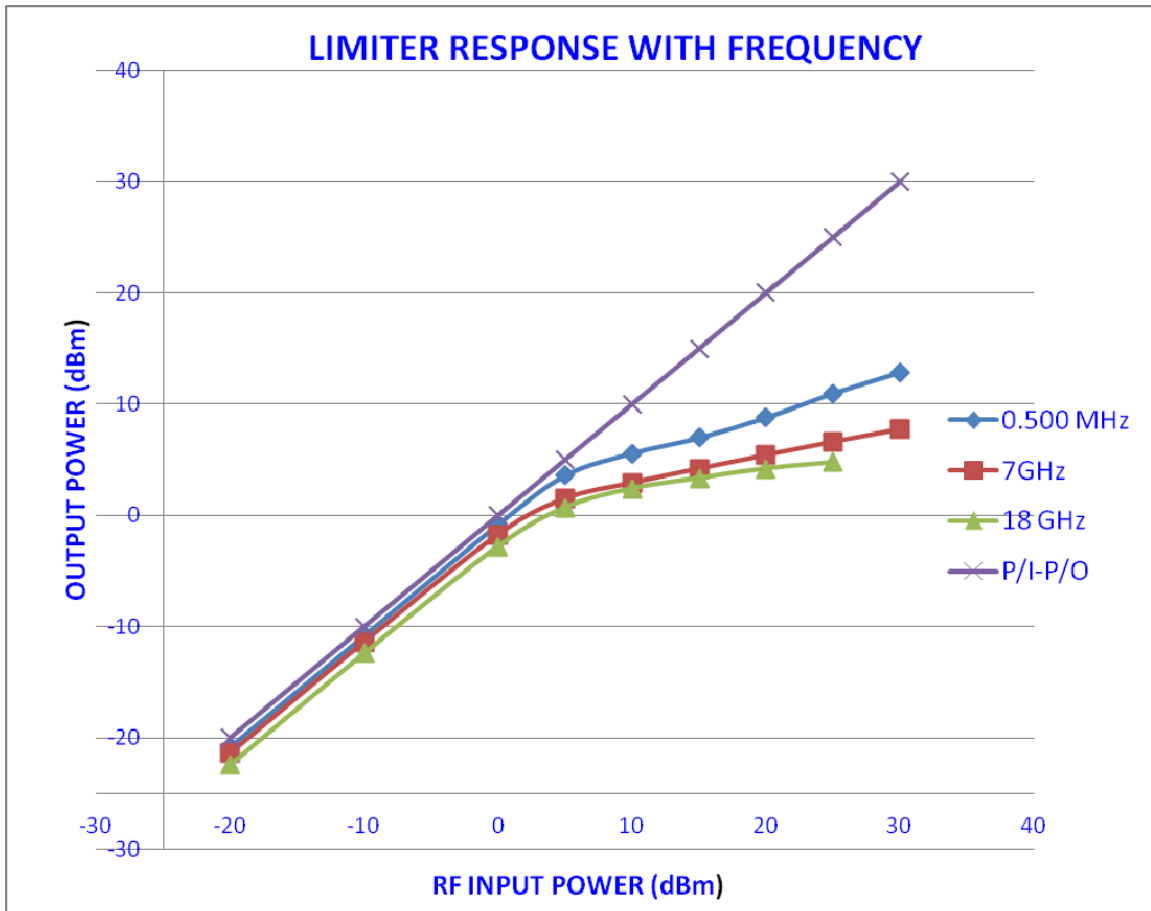




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Power Input vs. Output





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Recovery Time 1Watt @ 6GHz (1MHz - 50%Duty Cycle) - Pulse IN

