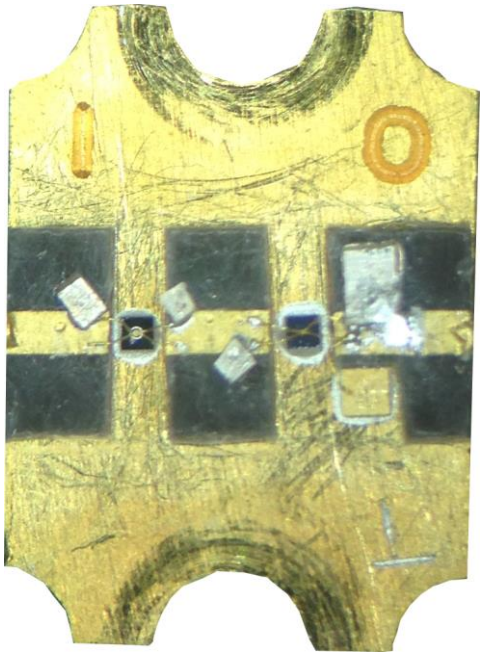
Typical Characteristics
on
LM-18G40G-SMT-1

Serial No. PL17417

PLANAR MONOLITHICS INDUSTRIES MODEL NUMBER LM-18G40G-SMT-1 IS A SURFACE MOUNT, HIGH POWER LIMITER THAT OPERATES FROM 18.0 GHz TO 40 GHz AND HANDLES 20 WATT CW POWER. THE LEAKAGE POWER IS +14dBm TYPICAL.



July 7, 2015

DESIGNED BY:
SEBASTIAN PALACIO

TESTED & REPORTED BY:
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Serial No. PL17417

Product Feature

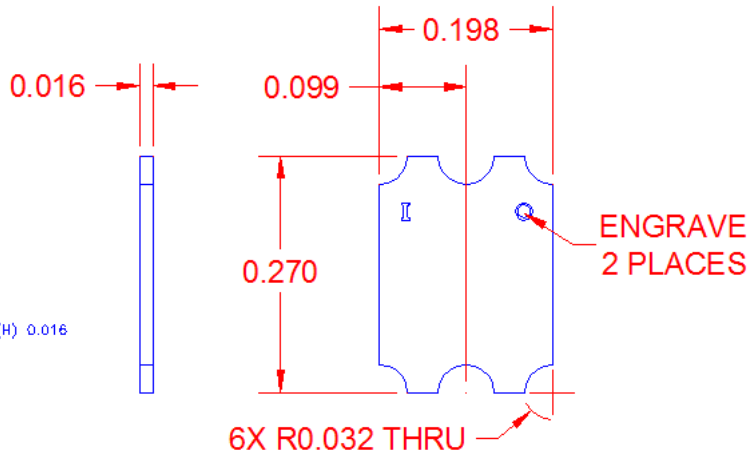
REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	1	ORIGINAL RELEASE	08/05/16	

DESCRIPTION:

MODEL LM-18G40G-SMT-1 IS A HIGH POWER LIMITER CAPABLE OF WITHSTANDING AN INPUT POWER LEVEL OF 20 WATTS, 440 TO 670 ns PULSE WIDTH, PRF 600 TO 900 kHz, 40% DUTY CYCLE. THIS MODEL OPERATES IN THE 18 GHz TO 40 GHz FREQUENCY RANGE. THE INSERTION LOSS IS 4.0 dB MAXIMUM, VSWR OF 2.0:1 AND 250 ns RESPONSE TIME. THIS LIMITER IS SUPPLIED ON A SURFACE MOUNT DROP-IN CARRIER

SPECIFICATIONS:

- FREQUENCY: 18 GHz TO 40 GHz
- INSERTION LOSS: 4.0 dB MAX.
- PEAK POWER: 20 WATTS (43 dBm)
- PULSE WIDTH: 440 TO 670 ns
- PRF: 600 TO 900 kHz
- DUTY CYCLE: 40%
- LEAKAGE POWER: +14 dBm TYP.
- 1dB RECOVERY TIME: 250 ns MAX.
- VSWR: 2.0:1
- SIZE: (L) 0.270 X (W) 0.198 X (H) 0.016



ENVIRONMENTAL RATINGS

- TEMPERATURE: −40 °C TO +60 °C (OPERATING)
  −50 °C TO +70 °C (STORAGE)
- HUMIDITY: MIL-STD-202F, METHOD 103B COND. B
- SHOCK: MIL-STD-202F, METHOD 213B COND. B
- VIBRATION: MIL-STD-202F, METHOD 204B COND. B
- ALTITUDE: MIL-STD-202F, METHOD 105C COND. B
- TEMPERATURE CYCLE: MIL-STD-202F, METHOD 107D COND. A

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

ALL DIMENSIONS ARE IN INCHES
TOLERANCES:
X.XX ±0.020
X.XXX ±0.010

PMI CONFIDENTIAL AND PROPRIETARY

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ISO 9001 CERTIFIED

APPROVALS	DATE
DRAWN: sfk	08/05/16
CHECKED	
ISSUED	

TITLE: PRODUCT FEATURE LM-18G40G-SMT-1

SIZE	FSCM NO.	DWG NO.	REV.
A	05XQ0	27025001	1

SCALE N:S SHEET 1 OF 1

Typical Characteristics on LM-18G40G-SMT-1

Serial No. PL17417

Summary Data

TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
1	Frequency Range:	18 GHz to 40 GHz	**18 GHz to 40 GHz**	
2	Insertion Loss:	4.0 dB Max.	**2.94 dB**	
3	Peak Power:	20 Watts (43 dBm)	**20 Watts**	
4	Pulse Width:	440 to 670 ns	**440 to 670 ns**	
5	PRF:	600 to 900 kHz	**600 to 900 kHz**	
6	Duty Cycle:	40%	**40%**	
7	Leakage Power:	+14 dBm Typ.	**14 dBm**	
8	1 dB Recovery Time:	250 ns Max.	**< 250 ns**	
9	VSWR:	2.0:1	**1.85:1 (Input)** **1.87:1 (Output)**	

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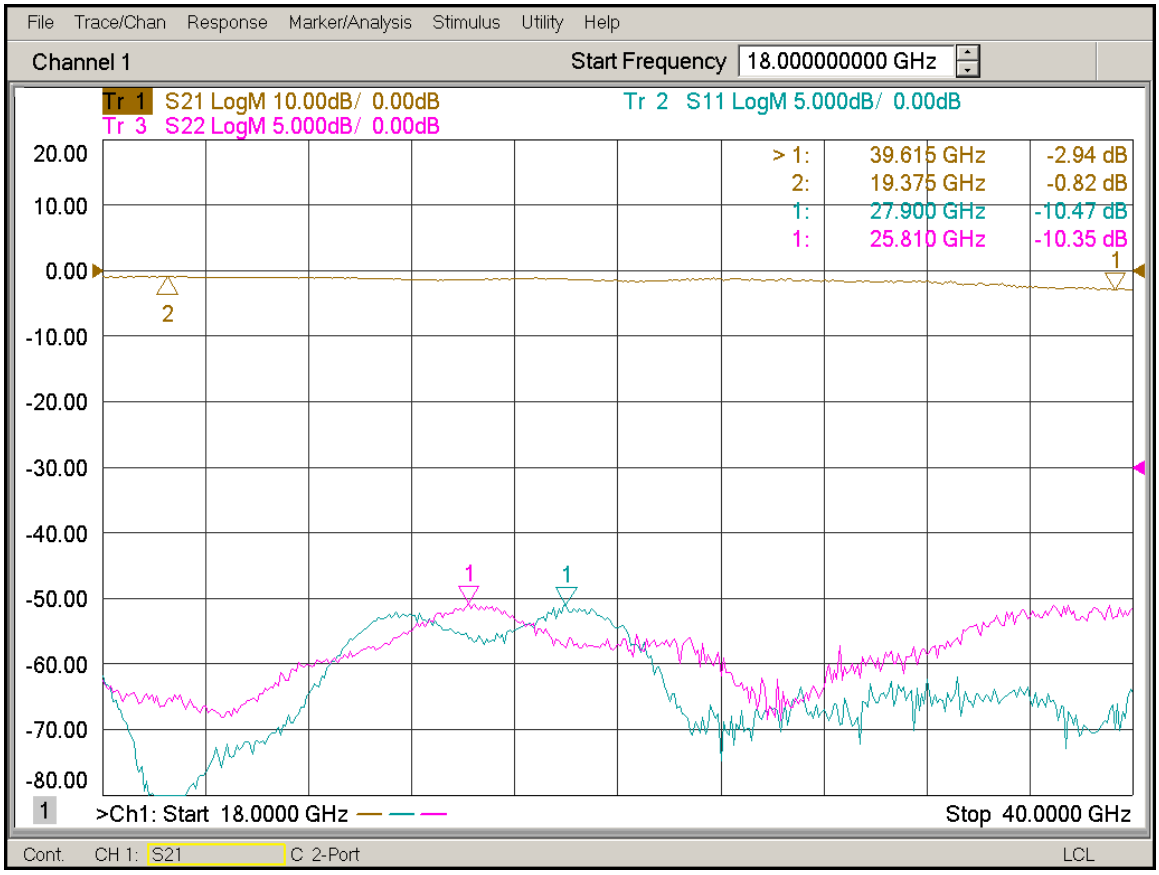
Insertion Loss & Return Loss (In/Out)



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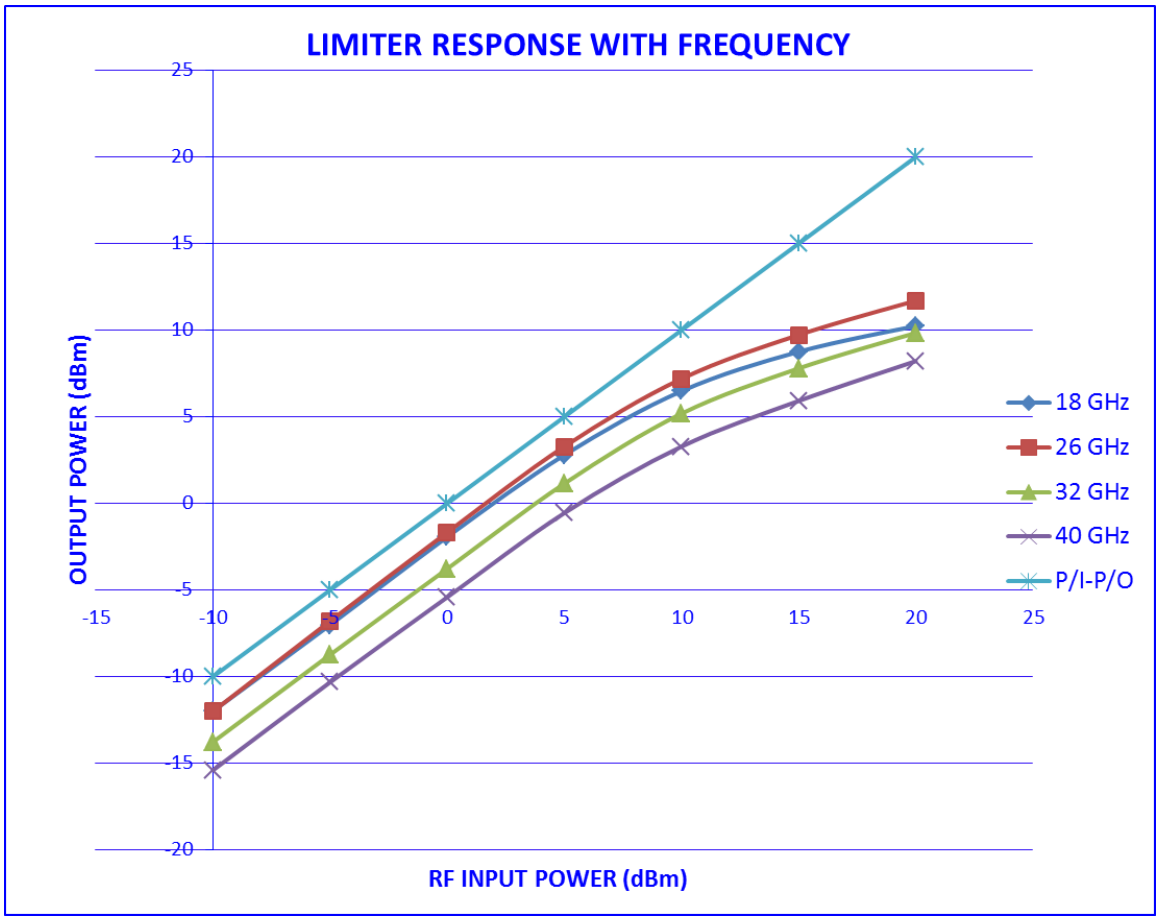
Power Input vs. Power Output



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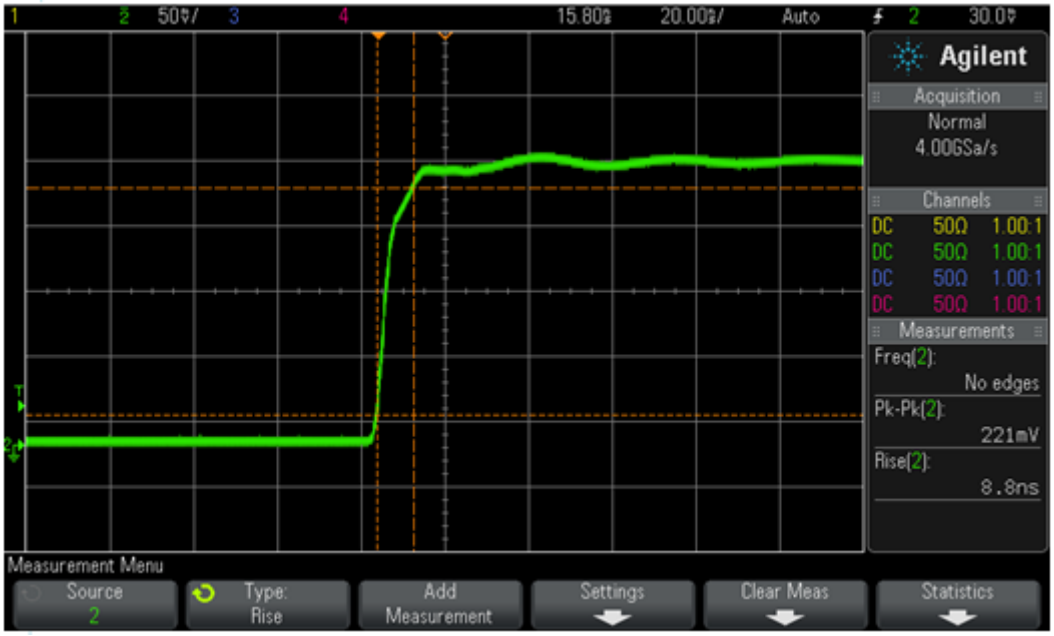
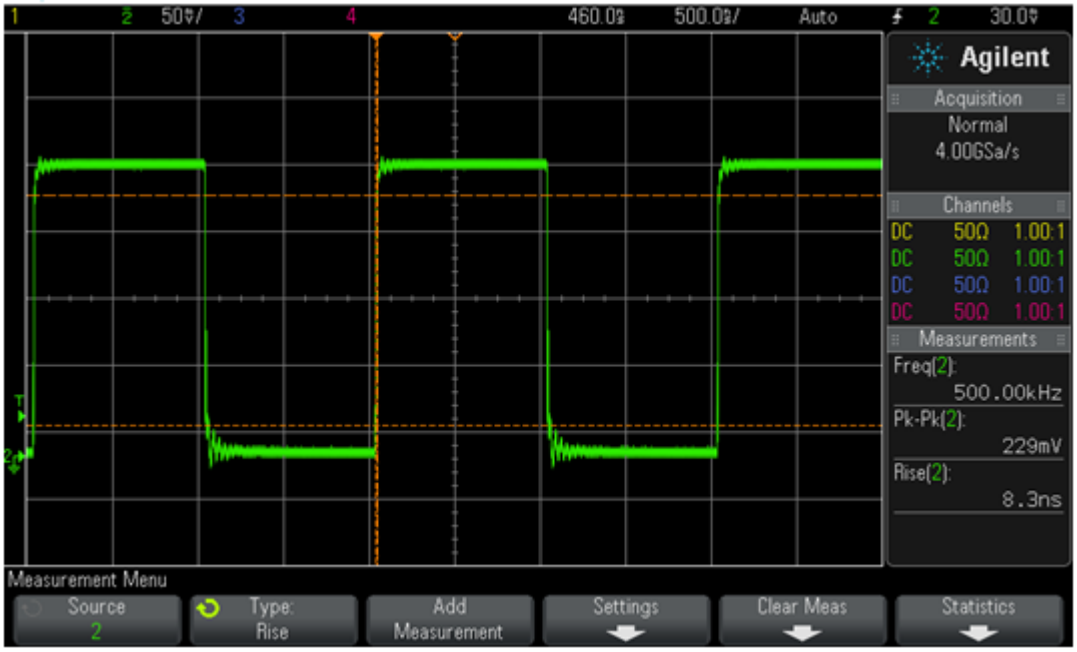
Recovery Time





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