



**PLANAR
MONOLITHICS
INDUSTRIES, INC.**

LEVEL, SCAN AND PULSE MODULATION MODULE

**PMI MODEL No:
LSP-0518-SK**

ISO 9001 : 1994 CERTIFIED

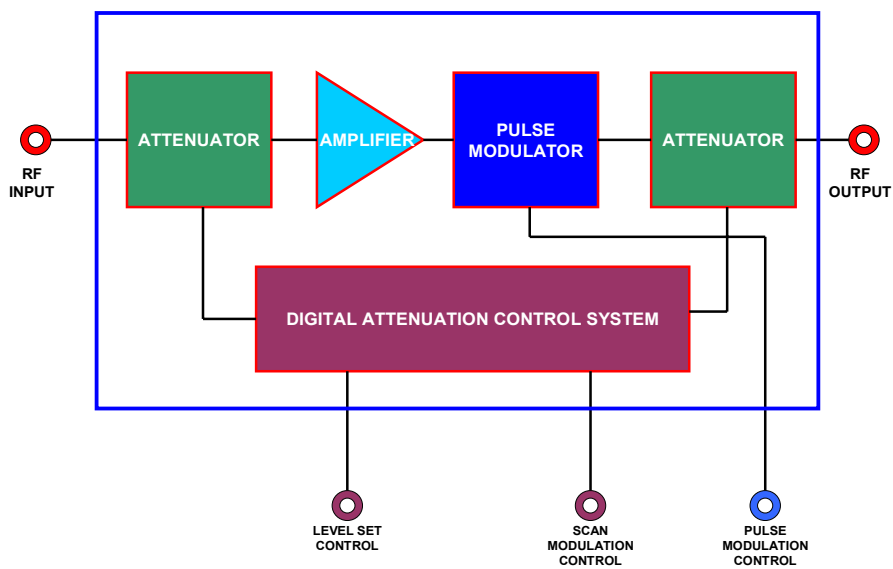
KEY FEATURES:

- RF PULSE WIDTH RANGE 50ns TO CW
- BROAD BANDWIDTHS AVAILABLE
- SMALL SIZE 4.0" X 3.3" X 0.70"

DESCRIPTION:

PMI MODEL LSP-0518-SK IS AN ANALOG LEVEL, SCAN AND PULSE MODULATION MODULE THAT IS CAPABLE OF EXPONENTIAL (LINEAR IN dB) MODULATION, FOR RUGGED AND HIGH RELIABILITY APPLICATIONS USING DIGITAL PROCESS TECHNIQUES, THAT WORKS FROM 0.5 TO 18.0 GHz.

FUNCTIONAL BLOCK DIAGRAM:



AVAILABLE OPTIONS:

- HERMETICALLY SEALED
- DIGITAL CONTROL MODULATION
- 10dB/VOLT CONTROL SENSITIVITY
- OTHER FREQUENCY RANGES AVAILABLE

PLANAR MONOLITHICS INDUSTRIES, INC., 7311-G GROVE ROAD, FREDERICK, MD 21704, USA
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SPECIFICATIONS:

• FREQUENCY RANGE	: 0.5 TO 18.0 GHz, Other Frequencies Available
• RF INPUT POWER	: +12 dBm Operational, +14 dBm Max.
• OUTPUT P1 dB	: +12 dBm Min. @ +12dBm Input
• IP3	: +22 dB Min.
• HARMONICS @ P1 dB	: -20.0 dBc Min.
• SPURIOUS OUTPUTS	: -60 dBc Min.
• VSWR (RF INPUT)	: 2.2:1 Max.
• VSWR (RF OUTPUT)	: 2.2:1 Max.
• LEVEL SET (POWER ATTENUATION)	: 70 dB Range
• SCAN MODULATION (ATTENUATION)	: 70 dB Range
• COMBINED ATTENUATION (LEVEL & SCAN)	: 100 dB Min.
• SCAN & LEVEL BANDWIDTH	: 10 kHz
• SCAN PULSE RESPONSE-SETTLING	: 50 µSec Max.
• SCAN PULSE RESPONSE-RISE & FALL	: 15 µSec Max.
• DIGITAL PROCESSING JITTER	: 10 µSec Max.
• SYSTEM FREQUENCY FLATNESS	: ±2.0 dB
• ATTENUATION FREQUENCY FLATNESS	: ±2.0 dB From 0 to 40 dB Attenuation ±3.0 dB From 40 to 60 dB Attenuation
• ATTENUATION LINEARITY	: ±1.5 dB
• PULSE MODULATION DEPTH	: 60 dB Min.
• RF PULSE WIDTH RANGE	: 50 nS to CW
• RF PULSE RISE & FALL	: 9 nS Max.
• RF PULSE REPETITION RATE	: 10 MHz Max.
• RF PULSE DISTORTION	: 0.3dB Max.
• PULSE CW / DIFFERENTIAL	: 0.4dB Max.
• PULSE WIDTH FIDELITY	: ±10 nS Max.
• SENSITIVITY	: 6 dB / Volt
• BIAS VOLTAGES / CURRENTS	: ±15 VDC @ +1.5 Amps & -1.0 Amps Max.
• SIZE	: 4.0" X 3.3" X 0.70"

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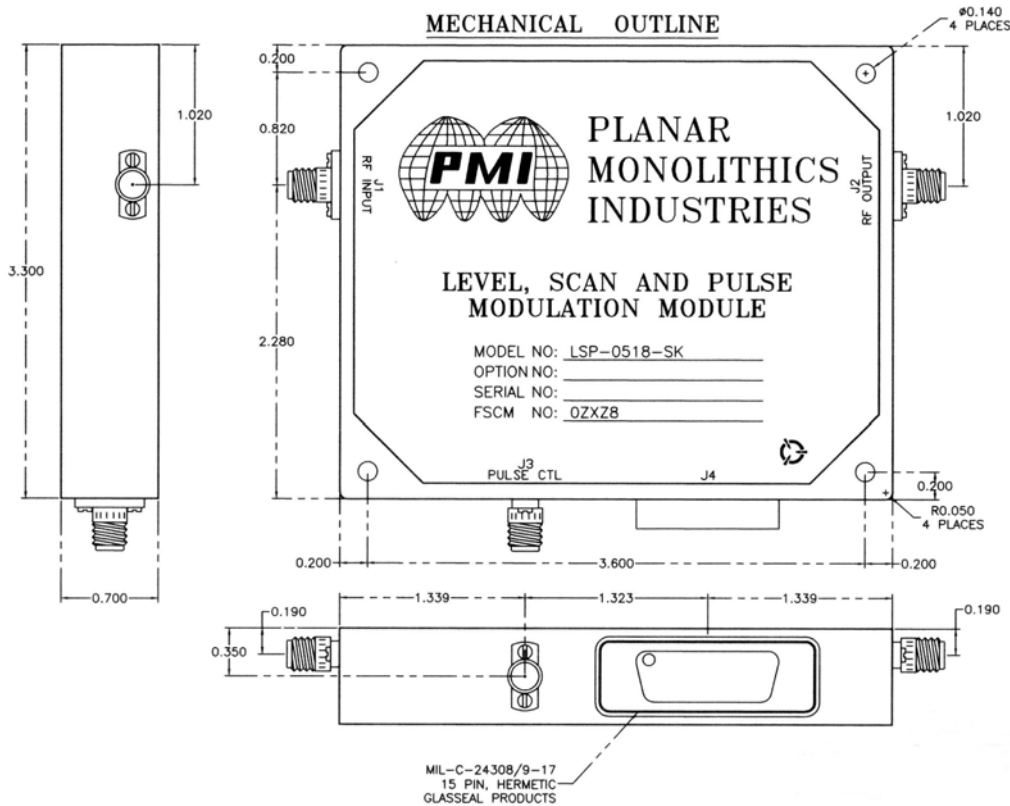


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MECHANICAL OUTLINE:



15 Pin "D" Connector (J4)	
PIN	FUNCTION
1	GROUND
2	-15 VDC
3	+15 VDC
4	GROUND
5	BAND SELECT TTL
6-13	NO CONNECTION
14	LEVEL SET MODULATION
15	SCAN MODULA- TION

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

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