

Integrated Microwave Phase Shifter/Mixer *Model 7188B*

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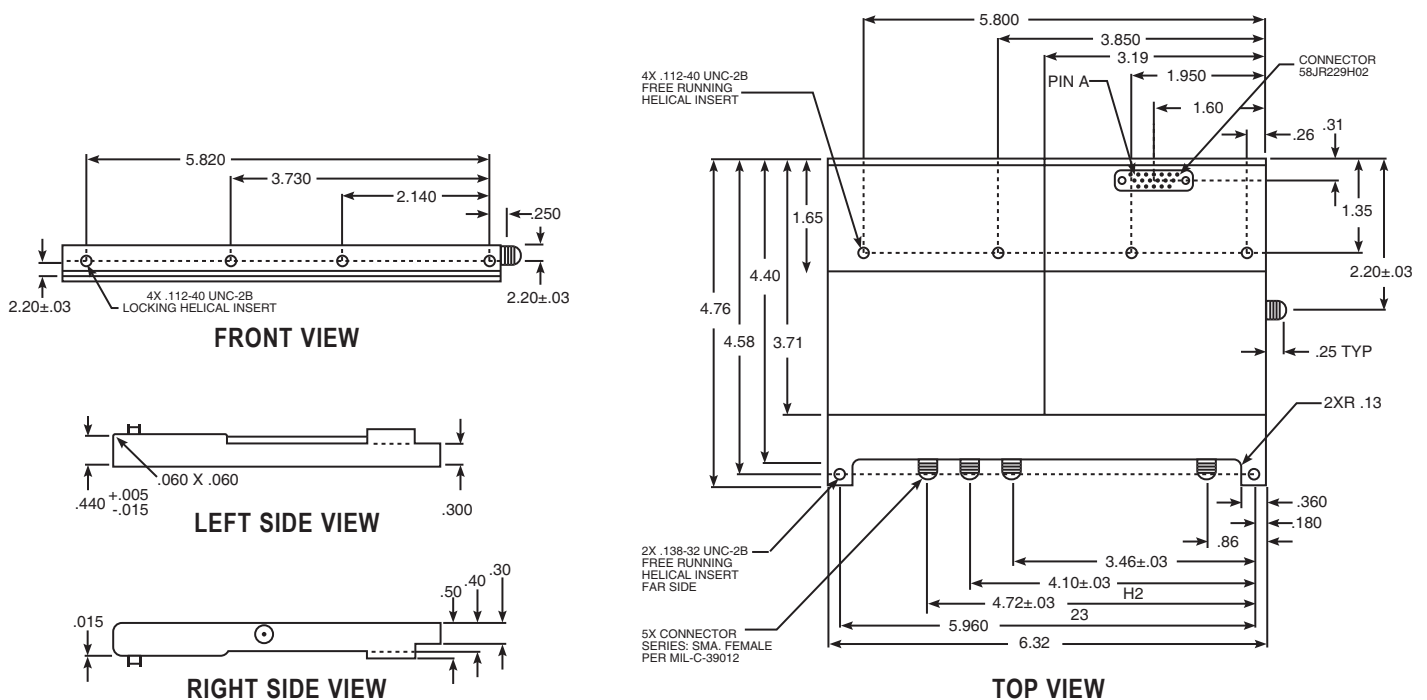


FEATURES:

- Soft substrate, hermetic sealed design
- Contains multiple functions; a linear 180° phase shifter, a 4-bit digital 360° phase shifter, I/Q phase detector, an amplitude detector, and two 30 dB switches
- High resistance to vibration, shock, and high humidity

The 7188B is an Integrated Microwave Phase Shifter/Mixer. This module contains multiple functions. A linear 180° phase shifter, a 4-bit digital 360° phase shifter, an I/Q phase detector, an amplitude detector, and two 30 dB switches are combined in this X-band microwave module. This design incorporates the soft substrate techniques that Herley has found to provide highly reproducible products. The soft substrate, hermetic sealed design has a high resistance to vibration, shock, and high humidity environments for long term reliable product.

The design of the 7188B employs the latest in devices, circuitry, and modern production processes to provide a reliable product with extremely long operating life.



Typical Outline - does not show all features - not to be used for generation of control drawings. For detailed outline drawing of a specific part number please contact Herley Industries, Inc.

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Integrated Microwave, Phase Shifter/Mixer - *Model 7188B*

Versions: This product is available in several versions. Call to discuss other variations, or your particular requirements.

Product Numbers:

P/N 7188B Standard Unit

ELECTRICAL

ANALOG PHASE SHIFTER

Linearity: $\pm 3^\circ/\text{Volts}$
Insertion Loss: 10 dB
Video BW: >3 MHz
Voltage: 1 to 10 Volts

DIGITAL PHASE SHIFTER

Accuracy: $\pm 12^\circ$
Insertion Loss: 12dB
Switch Time: <1 μsec

I/Q PHASE DETECTOR

Sensitivity: 2mV/ $^\circ$
RF In: -10 to +10 dBm

SWITCH

Isolation: 30 dB
Insertion Loss: 0.5 dB
Switch Time: <1 μsec

IMPEDANCE: 50 ohms nominal

ENVIRONMENTAL

TEMPERATURE, OPERATING: -40°C TO +70°C

TEMPERATURE, NON-OPERATING: -62°C to +95°C

RF LEAKAGE: 65 dB below RF signal level applied to the input ports

SUSCEPTABILITY: 66 dB of isolation between external RF fields and internal signal paths

MTBF: 5,000 hours

OPERATIONAL LIFE: 10,000 hours minimum

PHYSICAL

SIZE: 6.32"L x .44"H x 4.76"W (16.05 x 1.11 x 12.09 cms)

WEIGHT: 16 ounces (454 grms)

CONNECTORS: RF coaxial, type SMA

OPTIONS

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