Models 3003, 3006, 3007, 3010, & 3014 dc to 2.5 GHz
Manual Step, Ruggedized SMA Connectors 1 Watt

EXPRESS
www.argosysales.com
800-542-4457

Features

- **New Models -** Models 3053 & 3054 offer an extended frequency range to 6 GHz.
- **Available *Express* Models:** 3003-100
  3010-100
  Other models may be available for Express delivery.
- **High Reliability -** Repeatability better than 0.1 dB over frequency range and life. Weinschel patented detent mechanism, tested to 1,000,000 operations at +75°C, operates dependably even down to -40°C.
- **Product Uniformity -** High volume fabrication techniques, including injection molding, stamping, broaching and thick film printing ensure a cost effective and uniform product.
- **Low Frequency Sensitivity -** Typically 0.1 to 0.2 dB up to 2.5 GHz.
- **Shock Resistant -** 100% spring contact system withstands mechanical and thermal shock and eliminates the need for epoxy or solder.
- **Wide Selection -** Wide choice of attenuation ranges and increments in standard stock models. Single and dual drum configurations available.
- **Knob Included -** Knobs for both single and dual drum models are included with every attenuator. Characters are screened on the face of the knob insert which is coated with a clear layer of epoxy for protection.

Special Configurations

Some modifications to the basic configuration of the 3000 Series can be made during manufacturing. Examples of these special configurations are shafts having special lengths and ends; clockwise shaft rotation; modified mounting arrangements; and provisions for add-on items such as concentric potentiometer and ganged switches.

Specifications

NOMINAL IMPEDANCE: 50 Ω
FREQUENCY RANGE: FREQUENCY RANGE:
Models 3006, 3014: dc to 1.25 GHz
Models 3003, 3007, 3010: dc to 2.5 GHz
INCREMENTAL ATTENUATION RANGE/STEPS:
Model 3003: 0-70 dB in 10 dB steps
Model 3006: 0-100 dB in 10 dB steps
Model 3007: 0-10 dB in 1 dB steps
Model 3010: 0-70 dB in 1 dB steps
Model 3014: 0-110 dB in 1 dB steps
POWER COEFFICIENT: < 0.006 dB/dB/watt
TEMPERATURE COEFFICIENT: 0.0004 dB/dB/ °C
TEMPERATURE RANGE:
Operating: -40°C to +65°C
Non-Operating: -54°C to +85°C

ATTENUATION ACCURACY:

Model	Accuracy
3003	± 0.3 dB or 1% up to 60 dB ± 2% to 70 dB
3006	± 0.3 dB or 1% up to 60 dB ± 2% to 100 dB
3007	± 0.3 dB
3010	± 0.3 dB up to 10 dB ± 0.3 dB or 1.5% to 60 dB ± 2 % to 70 dB
3014	± 0.3 dB up to 10 dB ± 0.3 dB or 1.5% to 60 dB ± 3% to 110 dB

POWER RATING: 1 watts **average** @ 25°C ambient temperature, derated linearly to 0 watts @ 65°C. 100 watts **peak** (5 µsec pulse width; 0.5 % duty cycle).
CONNECTOR: SMA female connector per MIL-STD-348 interface dimensions - mate nondestructively with MIL-C-39012 connector.
SHAFT ROTATION: counter clockwise for increasing attenuation
STEP ANGLE: 32.7°
DRUM CONFIGURATIONS:
Single Drum: 3003, 3006, 3007
Dual Drum: 3010, 3014

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Revision Date: 9/30/2012

Specifications-Con't

MAXIMUM SWR & ZERO INSERTION LOSS:

Model	Frequency (GHz)	SWR	Loss (dB)
3003	dc - 2.5	1.20	< 0.3
3006	dc - 1.25	1.20	< 0.2
3007	dc - 2.5	1.30	< 0.3
3010	dc - 2.5	1.35	< 0.7
3014	dc - 1.25	1.30	< 0.5

SWITCHING LIFE: 1,000,000 steps
REPEATABILITY: ±0.1 dB over frequency range and rated life
ROTATION STOPS: Supplied on 10 dB step drums (not supplied on 1 dB drums).

INCREMENTAL PHASE SHIFT: ~0.25° per dB x f(GHz)
CONSTRUCTION: Shafting and external hardware and connector shells: CRES Type 303, per ASTM-A582 passivated per QQ-P-35. Housing: AL ALLOY Gold Flash. Knob is included with each unit.
TEST DATA: Test data is available at additional cost.
WEIGHT: Single drum: Net 125 g (4.4 oz)
Dual drum: Net 201 g (9.9 oz)

MODEL NUMBER DESCRIPTION:

Example:

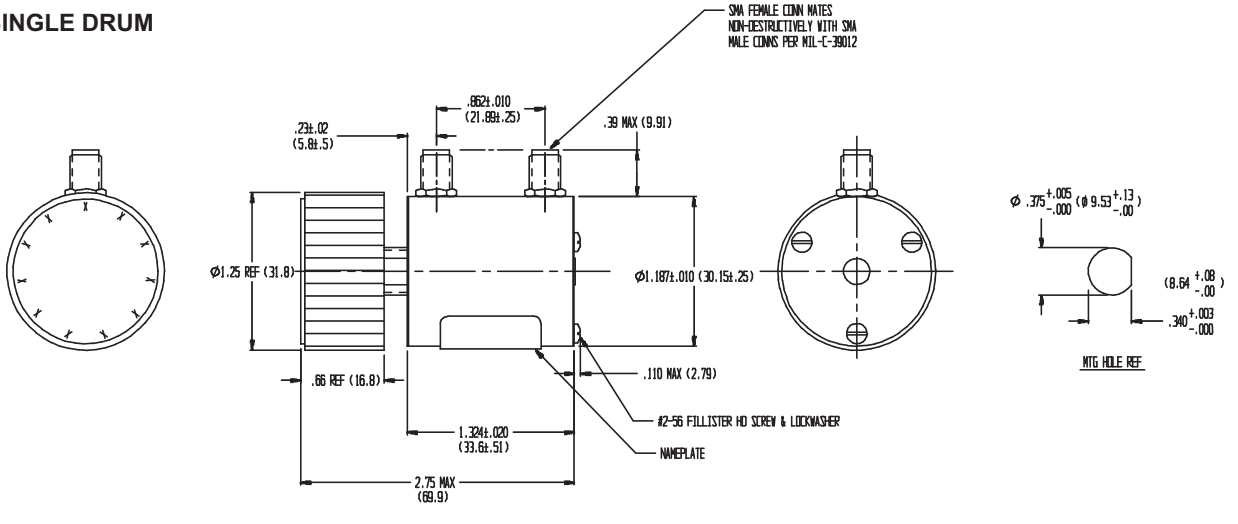
3010 - 100

Basic Model Number

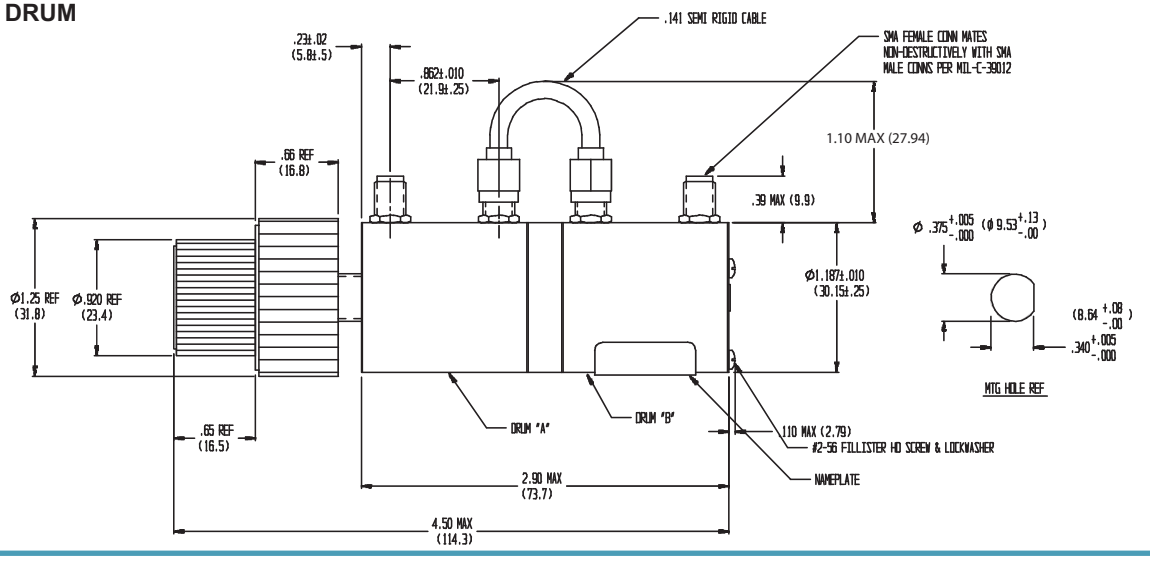
Additional Options no longer available. Add -100 Only!

PHYSICAL DIMENSIONS:

SINGLE DRUM



DUAL DRUM



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