

Solid State PIN Control Products

2-18 GHz

High Performance
Miniature Switches

- Very Small Package Size
- AVANPAK equivalents
- Reflective
- SPST and SP2T
- Low Insertion Loss
- Integral TTL Drivers
- Hermetically Sealed

Description

These miniature switches are ideal for applications where size is critical. They are direct replacements for AVANPAK™ Models* with equal or better specifications.

Specifications

Reflective Switches, SMA (F), 2 to 18 GHz

MODEL	TYPE	SWITCHING TIME MODULATION (ns)	BAND SEGMENTS (GHz)	INSERTION LOSS (dB max.)	VSWR (max.)	ISOLATION (dB min.)	POWER HANDLING (mW)	POWER SUPPLY REQUIREMENTS	
								mA @+5 V	mA @-12 V
SM213DHS	SPST	25	2-12 12-18	1.7 2.1	1.8 1.8	45 45	500	50	40
SM213DHS-60	SPST	25	2-12 12-18	1.9 2.4	1.8 1.8	60 60	500	50	40
SM123DHS	SP2T	25	2-12 12-18	2.3 2.9	1.8 1.8	50 50	200	60	40

* AVANPAK is a trademark of Avantek, Inc.

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Electrical Specifications

TTL CONTROL LOGIC

Logic 0 (0-0.8 V, 1.6 mA max. sink @ 0.4 V) = Insertion Loss
Logic 1 (2.0-5.5 V, 40 μ A max. source @ 2.4 V) = Isolation

SWITCHING TIME

T on = 50% TTL to 90% of RF voltage
T off = 50% TTL to 10% of RF voltage

SWITCHING RATE

5 MHz max. PRF @ 50% duty cycle

DRIVER

Reverse voltage protected

SURVIVAL POWER at 25°C (Cold Switching)

1.0W CW, 20W Peak (1 μ s max. pulse width, 5% duty cycle)
Derate Linearly to 50% at +95°C

Environmental Specifications

TEMPERATURE

Operating -54°C to +95°C
Storage -65°C to +125°C

HUMIDITY

Per MIL-STD-202F, method 103B, condition B
(96 hours @ 95% R.H.)

SHOCK

Per MIL-STD-202F, method 213B, condition B
(75 G, 6 ms)

ALTITUDE

Per MIL-STD-202F, method 105C, condition B
(50,000 feet)

VIBRATION

Per MIL-STD-202F, method 204D, condition B
(.06" double amplitude or 15 G, whichever is less)

THERMAL SHOCK

Per MIL-STD-202F, method 107D, condition A (5 cycles)

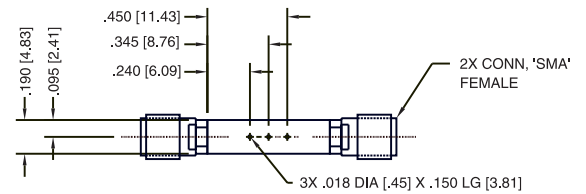
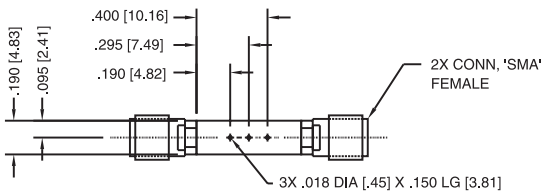
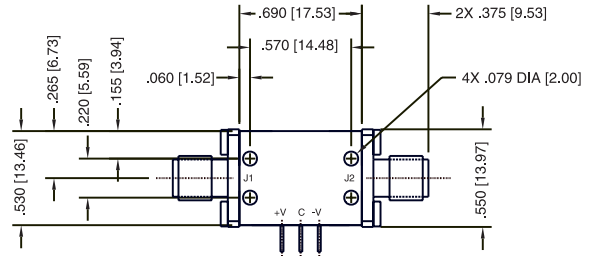
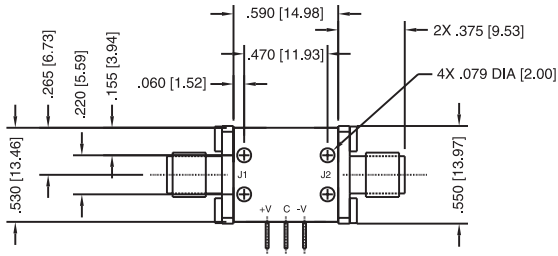
Narda SM Series To AVANPAK™ Model Cross Reference

NARDA MODEL	AVANPAK™ MODEL*
SM213DHS	AHS-1802-0
SM213DHS-60	AHS-1802-1
SM123DHS	AHD-1802-0

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Outline Drawings

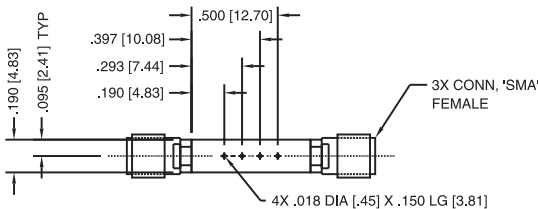
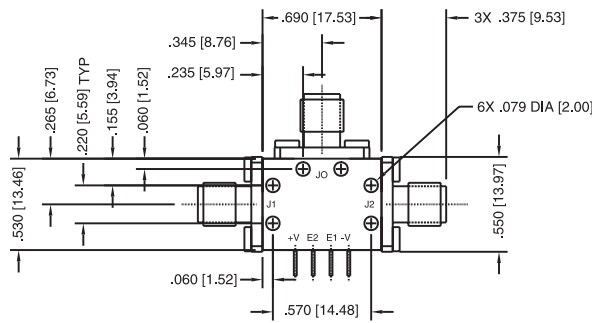


TOL:
XXX ±.020 [.51]

TOL:
XXX ±.020 [.51]

SM213DHS

SM213DHS-60



TOL:
XXX ±.020 [.51]

SM123DHS

Dimensions in inches (mm in parentheses), unless otherwise specified.