

RF Transfer Switch 10 - 2000 MHz

SW-119

V2.00

Features

- High Isolation - 60 dB Typical
- Low Loss - 0.7 dB Typical
- Fast Switching - 50 nSec Typical
- Integral Driver, TTL
- MIL-STD-883 Screening Available

Guaranteed Specifications* (From -55°C to +85°C)

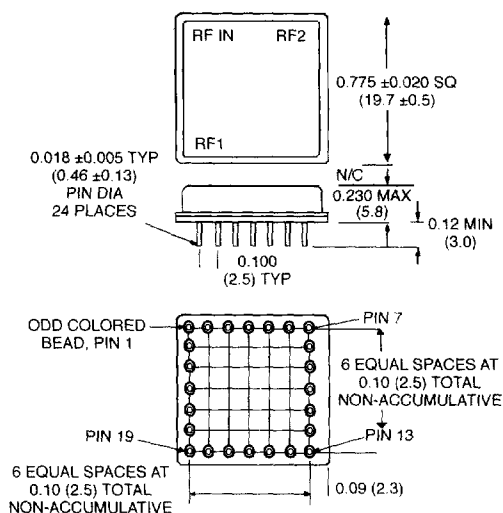
Frequency Range	10-2000 MHz	10-2000 MHz
Insertion Loss	10-2000 MHz 20-2000 MHz 50-1000 MHz	1.6 dB Max 1.1 dB Max 1.0 dB Max
VSWR	10-2000 MHz 20-1000 MHz	1.5:1 Max 1.3:1 Max
Isolation	10-2000 MHz 10-800 MHz 10-300 MHz	35 dB Min 40 dB Min 50 dB Min
Amplitude Balance		± 0.2 dB
Phase Balance	10-2000 MHz 10-1000 MHz 10-100 MHz	± 8° ± 4° ± 1°

Operating Characteristics

Impedance	50 Ohms Nominal	
Switching Characteristics		
ION, TOFF		60 nS Typ
IRISE, IFALL		50 nS Typ
Transients (In-Band)		300 mV Typ
Input Power	10-2000 MHz	+ 4 dBm Typ
for 1 dB Compression	200-2000 MHz	+ 25 dBm Typ
Intermodulation Intercept Point (for two-tone input power up to + 5 dBm)		
Second Order	(10-2000 MHz) (50-2000 MHz)	+ 42 dBm Typ + 65 dBm Typ
Third Order	(10-2000 MHz) (50-2000 MHz)	+ 16 dBm Typ + 35 dBm Typ
Bias Power	+ 5 to + 15 VDC @ 20 mA Max (150 mW Typical)	

*All specifications apply when operated with a bias voltage of +15 VDC and 50 ohm impedance at all RF ports.

DI-4



	RF IN	RF 1	RF 2	RF 3	RF 4	+V	CTL
SW-119	N/A	1	7	13	19	3	4

PINS UNMARKED ARE GROUND

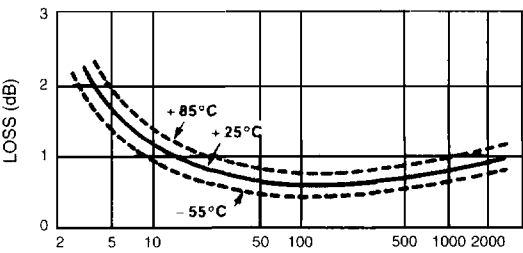
Dimensions in () are in mm.
Unless Otherwise Noted: .xxx = ±0.010 (.xx = ±0.25)
.xx = ±0.02 (.x = ±0.5)
WEIGHT (APPROX): 0.21 OUNCES 6 GRAMS

Ordering Information

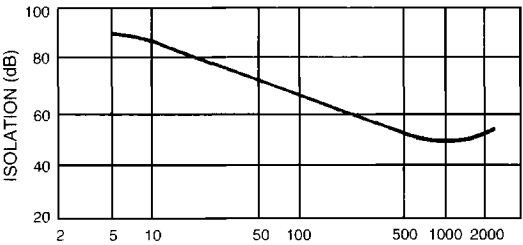
Part Number	Package
SW-119 PIN	Dual Inline

Typical Performance

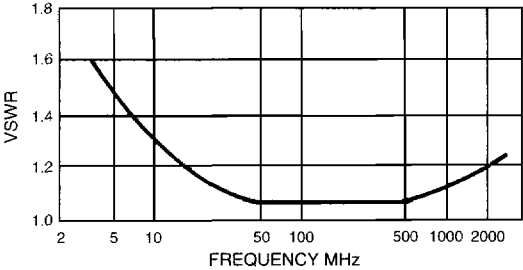
INSERTION LOSS



ISOLATION



VSWR



Truth Table

Control Input	Condition of Switch - RF Path			
	RF1-RF2	RF2-RF3	RF3-RF4	RF4-RF1
Logic High	ON	OFF	ON	OFF
Logic Low	OFF	ON	OFF	ON

Control logic is CMOS or open connector TTL with external pull up to +V.