

SW-233-PIN / SW-236-PIN



Matched GaAs SPDT Switch,
5 - 2000 MHz

Rev. V3

Electrical Specifications: $T_A = -55^{\circ}\text{C}$ to $+85^{\circ}\text{C}$ ¹

Parameter	Test Conditions	Frequency	Units	Min	Typ	Max
Insertion Loss	—	5 - 2000 MHz	dB	1.5	—	—
		5 - 1000 MHz	dB	1.2	—	—
		5 - 500 MHz	dB	1.1	—	—
VSWR	—	5 - 2000 MHz	Ratio	—	—	1.9:1
		5 - 1000 MHz	Ratio	—	—	1.5:1
		5 - 500 MHz	Ratio	—	—	1.4:1
Isolation	—	5 - 2000 MHz	dB	40	—	—
		5 - 1000 MHz	dB	45	—	—
		5 - 500 MHz	dB	53	—	—
IP ₂	For two tone input power up to +13 dBm	500 - 2000 MHz	dBm	—	+68	—
		50 MHz	dBm	—	+60	—
IP ₃	For two tone input power up to +13 dBm	500 - 2000 MHz	dBm	—	+46	—
		50 MHz	dBm	—	+40	—

1. All specifications apply when operated with bias voltages of +5 VDC (SW-205) or +8 VDC (SW-206) and 50 ohm impedance at all RF ports.

SW-233

Parameter	Test Conditions	Frequency	Units	Min	Typ	Max
Trise, Tfall Ton, Toff Transients	50% CTL to 90/10% RF In-band	—	nS	—	7	—
		—	nS	—	20	—
		—	mV	—	100	—
1 dB Compression	Input Power	500 - 2000 MHz	dBm	—	+27	—
		50 MHz	dBm	—	+21	—
Bias Power	+5 VDC @ 0.12 mA Typ	—	mA	—	—	1

SW-236

Parameter	Test Conditions	Frequency	Units	Min	Typ	Max
Trise, Tfall Ton, Toff Transients	50% CTL to 90/10% RF In-band	—	nS	—	20	—
		—	nS	—	40	—
		—	mV	—	70	—
1 dB Compression	Input Power	500 - 2000 MHz	dBm	—	+33	—
		50 MHz	dBm	—	+26	—
Bias Power	+5 to +8 VDC @ 0.12 to 0.40 mA Typ	—	mA	—	—	1

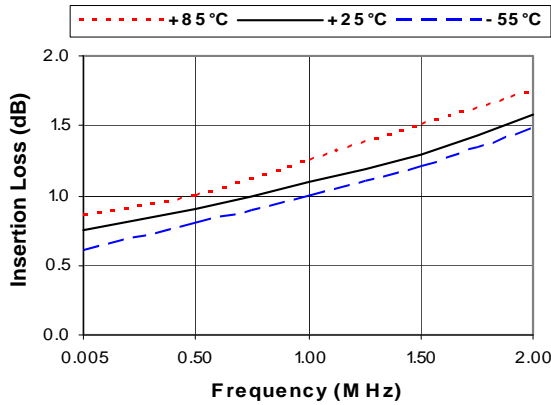
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Matched GaAs SPDT Switch,
5 - 2000 MHz

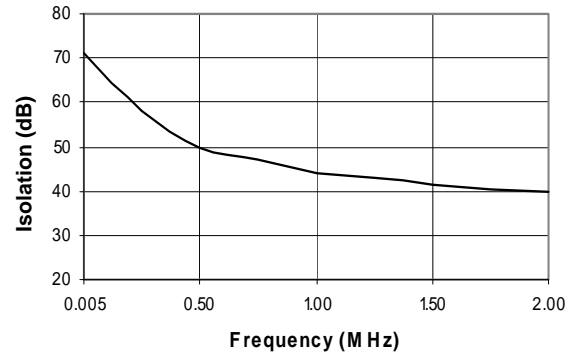
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Typical Performance Curves

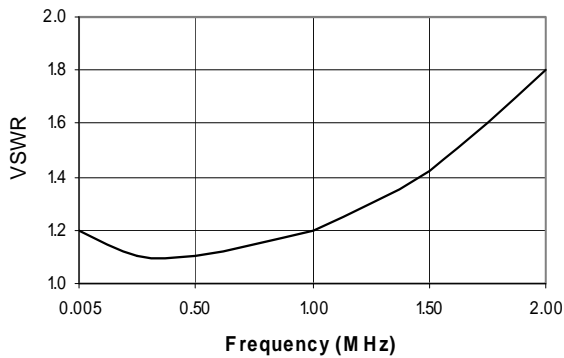
Insertion Loss



Isolation



VSWR



Schematic

