

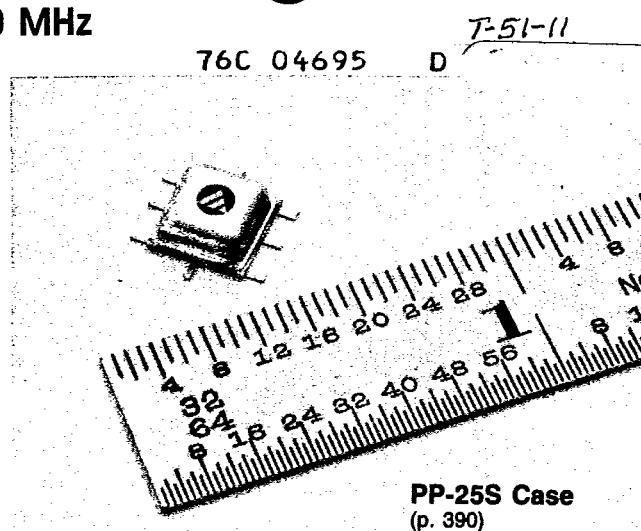
PPS-010

Surface Mount SPDT Switch 10-2000 MHz



1141966 AVANTEK INC
FEATURES

- Broadband Frequency Coverage
- Non-Reflective
- Low Insertion Loss
- PlanarPak™ Surface Mount Package



ELECTRICAL SPECIFICATIONS (Measured in a 50-ohm system unless otherwise noted)

Symbol	Characteristic	Typical $T_C = 25^\circ\text{C}$	Guaranteed Specifications		Unit
			$T_C = 0^\circ\text{ to } 50^\circ\text{C}$	$T_C = -55^\circ\text{ to } +85^\circ\text{C}$	
BW	Frequency Range	10-2000 MHz	10-2000 MHz	10-2000 MHz	MHz
—	Insertion Loss				
	10-500 MHz	1.1	1.5 max	1.5 max	dB
	500-2000 MHz	1.6	2.5 max	2.5 max	dB
—	VSWR (ON or OFF)	1.1:1	1.7:1 max	1.7:1 max	
—	Isolation				
	10-200 MHz	45	40 min	40 min	dB
	200-500 MHz	36	30 min	30 min	dB
	500-2000 MHz	27	20 min	20 min	dB
—	Amplitude Match Between Channels				
	10-500 MHz	± 0.05			dB
	500-2000 MHz	± 0.1			dB
—	Phase Match Between Channels	± 1			Degree
IP ₃	Third Order Intercept Point				
	10-100 MHz	+30			dBm
	100-2000 MHz	+41			dBm
HP ₂	Second Harmonic Intercept Point				
	10-100 MHz	+52			dBm
	100-2000 MHz	+65			dBm
—	Switching Speed (10-90%)	5			μsec
—	Control Voltage	± 15			Volts
—	Current @ ± 15 Volts	7			mA

MAXIMUM RATINGS

DC Voltage	± 17 Volts
RF Input Power (CW or Pulse)	
Into "ON" Channel	+26 dBm
Into "OFF" Channel	+21 dBm
Operating Case Temperature	-55°C to +125°C
Storage Temperature	-62°C to +150°C
"R" Series Burn-In Temperature	+125°C

WEIGHT: (typical) 0.2 grams

TYPICAL PERFORMANCE AT 25°C

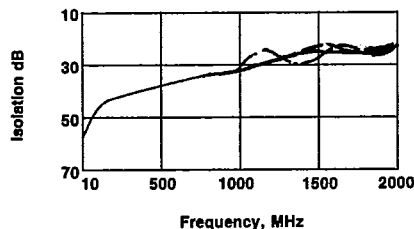
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KEY: +25°C ———
+85°C - - - - -
-55°C

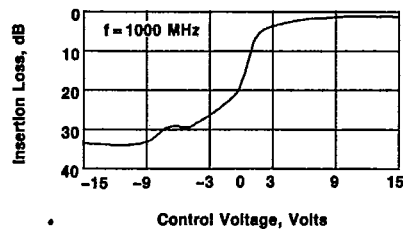
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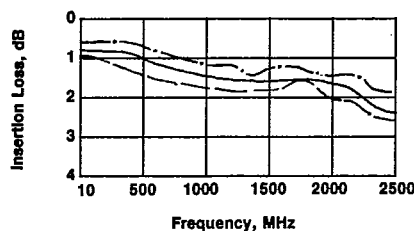
Isolation



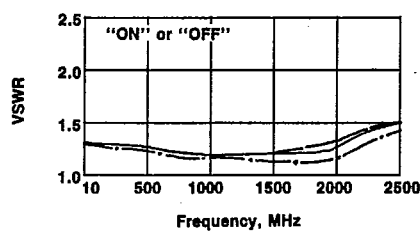
Insertion Loss vs. Control Voltage



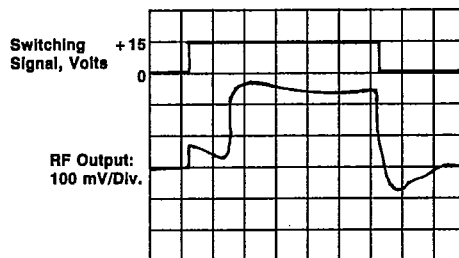
Insertion Loss



VSWR Worst Case, All Ports



Switching Speed
RF Input: 20 MHz @ 0 dBm



Time: 10 μsec/Div.

SWITCHES