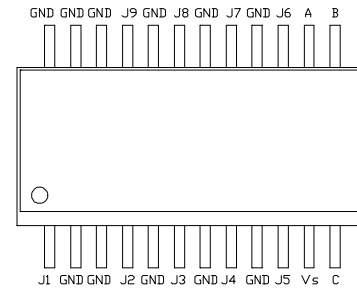


# SP8T SWITCH WITH DIRECT TTL CONTROL AND SINGLE POSITIVE SUPPLY ITT801AN

# ADVANCED INFORMATION

## FEATURES

- Single Positive Supply (8V)
- Direct TTL input
- On-Chip Decoder Logic
- Low Power Consumption
- Non-Reflective Ports



## DESCRIPTION

This is a low-loss SP8T, single-supply switch in a narrow body SSOP-24 lead package. The switch can be controlled using direct TTL logic and incorporates an on-chip 3:8 decoder.

## MAXIMUM RATINGS (T<sub>A</sub> = 25 °C unless otherwise noted)

Rating	Symbol	Value	Unit
RF input power	J <sub>1,2,3</sub>		
Control Voltage	V <sub>1,2</sub>		
Junction Temperature	T <sub>J</sub>	+150	°C
Storage Temperature	T <sub>STG</sub>	-40 to +150	°C

## ELECTRICAL SPECIFICATIONS AT 25 DEGREES C

Parameter	Frequency	Min.	Typ.	Max.	Unit
Insertion Loss	DC-0.5 GHz		0.9	1.2	dB
	DC-1.0 GHz		1.	1.5	dB
	DC-2.0 GHz		1.5	1.8	dB
Isolation	DC-0.5 GHz	39	42		dB
	DC-1.0 GHz	33	36		dB
	DC-2.0 GHz	23	26		dB
VSWR	DC-0.5 GHz		1.3:1	1.5:1	
	DC-1.0 GHz		1.5:1	1.7:1	
	DC-2.0GHz		1.7:1	1.9:1	

## OPERATING CHARACTERISTICS AT 25 DEGREES C

Parameter	Condition	Freq.	Min.	Typ.	Max.	Unit
Switching Characteristics	Rise, Fall (10/90% or 90/10% RF)			15		nS
	On, Off (50% CTL to 90/10% RF)			35		nS
	Video Feedthru			30		mV
Input Power for 1 dB Compression		0.50-3.0 GHz		+24		dBm
		0.05 GHz		+16		dBm
Intermodulation Intercept Point (IP3)	For Two-tone Input Power +5 dBm	0.50-3.0 GHz		+40		V
		0.05 GHz		+29		V

