

E-Band Reflective FET Switch

60-90 GHz/SP4T/ WR-12

Model: TMSP4T-060090-12

The TMSP4T-060090-12 is a E-Band switch with Negative logic level that operates between 60 and 90 GHz. The SP4T switch offers 30 dB port-to-port isolation with a typical switching speed of 100 nanoseconds. The input and output connectors of the switch are WR-12.

Features:

- Frequency range: 60-90GHz
- Low Insertion Loss: 4dB
- Power Handling : 20 dBm
- High Isolation
- Switch Type: Reflective

Applications:

- Communication Systems
- Automatic Test Equipment
- Switching Network

Electrical Characteristics:

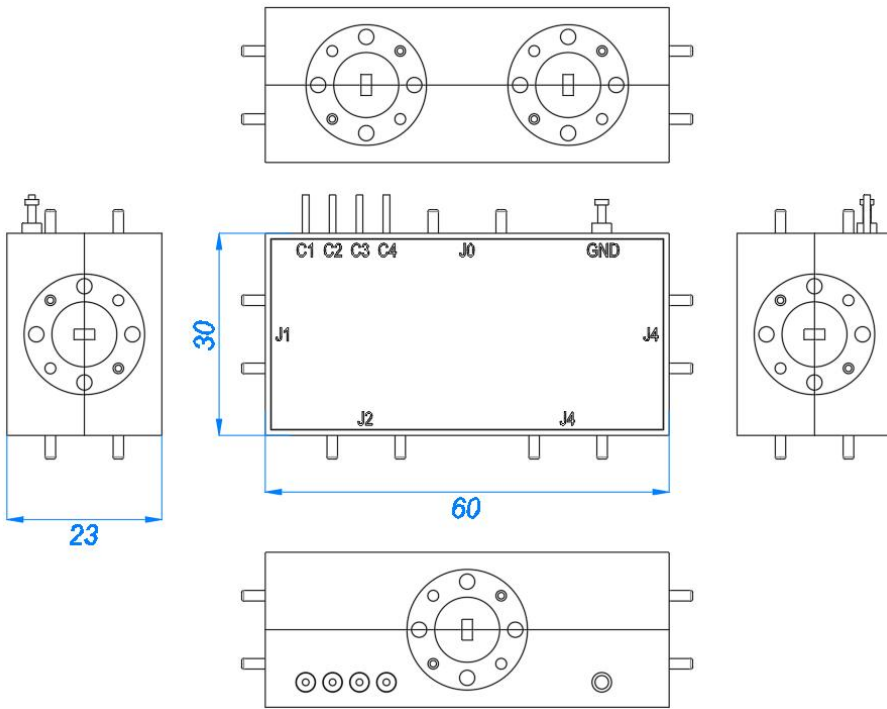
Parameter	Min	Typ	Max	Units
Frequency range		60-90		GHz
Insertion Loss		4		dB
Isolation		30		dB
Switch Speed		100		ns
Input VSWR		1.7		:1
Output VSWR		1.3		:1
P1dB Output P1dB		20		dBm
Control Voltage		-4/0		V
DC Supply Current		-100		mA
Switch type		Reflective		

Absolute Maximum Ratings :

Description	Parameter	Units
Control Voltage	-4 (+5%)	V
RF Input Power	20	dBm
ESD sensitivity (HBm)	Class 0, passed 150V	

Mechanical Specifications:

Description	Parameter	Units
Input /Output Connector	WR-12/UG-387/U	
Control Bias	Solder Pin	
Size	60*30*23	mm



Truth Table				
TTL Control Input				Signal Path State
Bit1	Bit2	Bit3	Bit4	
-4V	0	0	0	J0-J1
0	-4V	0	0	J0-J2
0	0	-4V	0	J0-J3
0	0	0	-4V	J0-J4



ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	-45		+85	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

Base Number	Description	Revision
TMSP4T-060090-12	E-Band Reflective FET Switch 60-90 GHz,SP4T,WR-12	Rev.1.1