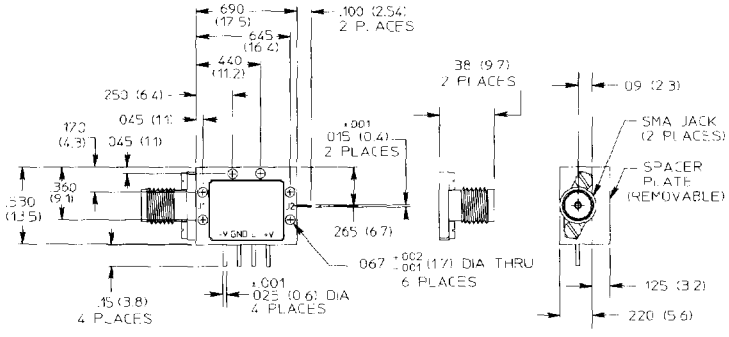
SPST Reflective Switches With TTL Drivers and Removable Connectors

2680 Series

Features

- Broadband Frequency Ranges
- Hermetically Sealed
- TTL Drivers
- Removable SMA Connectors



Description

M/A-COM's diode switches cover multi-octave bandwidths from S to Ku-band. M/A-COM's capability in both semiconductor and digital circuit technology allows considerable flexibility in the tradeoffs of power, speed, RF parameters and drivers. These switches may be used as drop-ins on stripline assemblies by removing the SMA connectors.The removable mounting plate allows clearance when using the device with cable assemblies. The SMA connector seals are integrated in the housing to allow connector removal without violating the hermetic seal. Typical swept insertion loss, return loss, and isolation curves are shown below.

Maximum Ratings

Storage Temp.	-65°C to +125°C
Operating Temp.	-55°C to +125°C
Input Power	0.5 W CW/Avg.

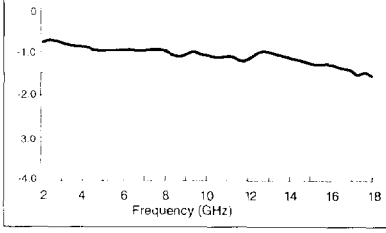
Environmental

These devices are designed to meet the following screening conditions:

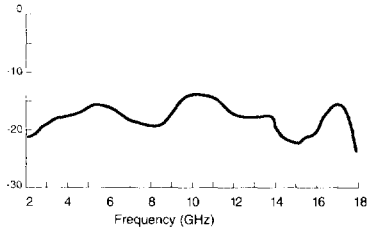
Test	Method	Cond
Non-Destructive Bond Pull	2023	
Internal Visual Inspection	2017	
Stabilization Bake	1008	B
Thermal Cycle	1010	B
Constant Acceleration	2001	A (Y1 Axis)
Burn-in	1015	+125°C
Seal Fine	1014	A1
Gross	1014	C1
External Visual	2009	

Typical Performance Data 2680-1003

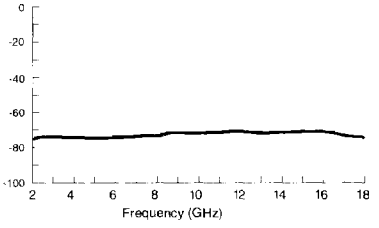
Insertion Loss (dB)



Return Loss (dB)



Isolation (dB)



Specifications Subject to Change Without Notice.

Specifications 25°C

Frequency Range (GHz)	Insertion Loss (dB)	VSWR	Isolation (dB)	Transition Time (nS)	Switching Speed (nS)	Part Number
2-8	1.4	1.50:1	70	10	20	2680-1001
8-18	2.4	2.00:1	75	10	20	2680-1002
2-18	2.5	2.10:1	70	10	20	2680-1003

Notes:

1. Driver current req. +5.0 ± .25V @ +40mA typ.
   -11.0 - 15V @ -50mA typ.
2. Transition Time measured from 10% to 90% of detected RF.
3. Switch Speed measured from 50% TTL to 10%/90% of detected RF.
4. Other logic options are available, consult factory.

Logic Table

TTL Control Input LI	
0	Insertion Loss
1	Isolation

TTL Logic: "0" =0 to 0.8V @ -1.6 mA Max. Sink.
"1" =2.0 to 5.0V @ 40μA Max. Source.