

# ABSORPTIVE SPST SWITCH with TTL Driver

**RoHS Compliant** 





# **DESCRIPTION**

Microsemi – Lowell's switch modules provide an economical way of achieving a switch function from UHF through Ku band. These switch modules provide broadband, high performance characteristics in a small package. Our catalog parts are basic examples of our capability. We will be glad to explore your specific requirements with the goal of providing custom parts for your needs.

This series of modules meets RoHS requirements per EU Directive 2002/95/EC. The standard terminal finish is gold unless otherwise specified. Consult the factory if you have special requirements.

IMPORTANT: For the most current data, consult MICROSEMI's website: www.MICROSEMI.com



These devices are ESD sensitive and must be handled use using ESD precautions.

# **KEY FEATURES**

- Multi Octave Frequency Ranges
- Hermetically Sealed
- Coaxial Connections
- Consistent VSWR
- Internal TTL Driver
- RoHS Compliant

#### ABSOLUTE MAXIMUM RATINGS AT 25° C (UNLESS OTHERWISE SPECIFIED) Symbol Rating Value Unit ٥С Storage Temperature $T_{STG}$ -55 to +125 ٥С Operating Temperature TOP -55 to +95 RF CW Power Handling Pcw 0.5 W

## APPLICATIONS/BENEFITS

- Coax Assembly
- Broadband (0.5 18 GHz)

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GUARANTEED ELECTRICAL PARAMETERS @ 25°C (unless otherwise specified)							
Model Number	Frequency Range	Ins. Loss (dB) (Max)	Isolation (dB) (Min)	VSWR (Max)	SWITCHING SPEED (uS) (Max)		
GG71420-01	0.5 - 4.0	1.7	55	1.5:1	1.0		
GG71420-02	2.0 - 8.0	2.1	50	1.7:1	1.0		
GG71420-03	4.0 - 12.4	2.4	45	1.8:1	1.0		
GG71420-04	8.0 - 18.0	2.9	45	1.9:1	1.0		
GG71420-05	2.0 - 18.0	2.9	45	2.0:1	1.0		

### Notes:

- RF Power Handling: 0.5W CW. 1.
- Switching Speed is measured from the 50% point of the TTL pulse to the 90/10% of the 2. detected RF pulse with a 100 KHz maximum switching rate.
- Required D.C.Bias: +5V @75mA (max) and -8 to -15 volts @ 50mA (max) 3.
- Logic: TTL "0" = loss; TTL "1" = isolation 4.
- 5. In the isolation state the switch is matched at J1 input only.

# ENVIRONMENTAL

These units are designed to withstand the following environmental conditions without damage.

ENVRONMENTAL CONDITIONS							
TEST	MIL-PRF	METHOD	CONDITION				
Internal Visual	883	2017					
Stabilization Bake	883	1008	В				
Thermal Cycle	883	1010	В				
Constant Acceleration	883	2001	1 (Y1 Axis)				
Burn In	883	1015	125 °C				
Humidity	202	103B	В				
External Visual	883	2009					

# **OUTLINE 210059** .26 MAX ĞND V+ .26 .20 26 MAX 4 PL .025 DIA PIN 4 PL .090 DIA THRU 4 PL

# **NOTES**

- 1. All pins are .025 ±.001" dia., .100" (min) long.
- 2. Tolerances:
- .xxx .010"
- .xx .020"
- 3. Leads gold plated per MIL-G-45204, Type 3, Grade A 50 µinch (min).
- 4. Case finish: Epoxy Paint, Grey #36231.
- 5. Other packaging available on special order.

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