

GG72030

REFLECTIVE SPDT SWITCH MODULES

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.

KEY FEATURES

- Multi Octave Frequency Ranges
- Hermetically Sealed
- Microstrip/Stripline Compatible
- RoHS Compliant

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

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

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

APPLICATIONS/BENEFITS

- Drop in SPDT Module
- Broadband (0.5 18 GHz)

GUARANTEED ELECTRICAL PARAMETERS @ 25°C (unless otherwise specified)						
Frequency	Insertion Loss ¹ (dB)	Isolation ¹ (dB)	VSWR		(nS) speed)	
Range	(Max) `´	(Min) ໌	(Max)	T _{RISE}	T _{FALL}	
0.5 - 4.0	0.8	60	1.5:1	30	10	
2.0 - 8.0	1.3	60	1.7:1	30	10	
4.0 - 12.4	1.8	55	1.8:1	30	10	
8.0 -18.0	2.2	50	1.9:1	30	10	
2.0 - 18.0	2.3	45	2.0:1	30	10	
	Frequency Range 0.5 - 4.0 2.0 - 8.0 4.0 - 12.4 8.0 - 18.0	Frequency Range Insertion Loss ¹ (dB) (Max) 0.5 - 4.0 0.8 2.0 - 8.0 1.3 4.0 - 12.4 1.8 8.0 - 18.0 2.2	Frequency RangeInsertion Loss1 (dB) (Max)Isolation1(dB) (Min)0.5 - 4.00.8602.0 - 8.01.3604.0 - 12.41.8558.0 - 18.02.250	Frequency RangeInsertion Loss1 (dB) (Max)Isolation1(dB) (Min)VSWR 	$\begin{array}{ c c c c c c c c } \hline Frequency Range & Insertion Loss1 (dB) (Max) & Isolation1 (dB) (Min) & VSWR (Max) & Ts^4 (Sw. s) \\ \hline & (Sw. s) (Max) & (Min) & (Max) & T_{RISE} \\ \hline & (Sw. s) (Max) & (Max) & T_{RISE} \\$	

Notes:

1. RF Power Handling; 0.5W CW.

2. Switching Speed: Rise time, 30nS (max); Fall time, 10nS (max).

3. Required D.C. Bias: Insertion Loss, -35mA; Isolation, +30 mA.

4. Switching Speed is measured from 10%-90% and from 90%-10% of the detected RF pulse with a 2 MHz maximum switching rate.

5. Temperature Rating: Operating, -55 to +95°C; Storage, -55° to +125°C.



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e4

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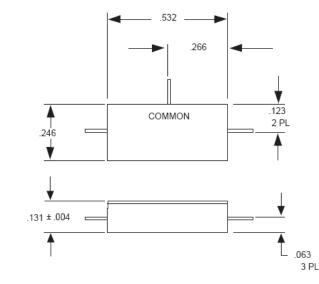
ENVIRONMENTAL

These units are designed to meet the following environmental criteria.

ENVRONMENTAL C	CONDITIO	NS

TEST	MIL-PRF	METHOD	COND.
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 ⁰C
Seal – Fine Leak Seal – Fine Leak	883	1014	A1 C1
External Visual	883	2009	

OUTLINE 210004



NOTES

- All pins are 0.012 ±0.001" dia, 0.100" (min) long. May be supplied with tabs, 0.025 ±0.01 x 0.006 ±0.002, upon request.
- 2. Tolerance on 3 place decimal, ±0.003" unless otherwise specified.
- 3. Case and leads gold plated per MIL-G-45204, Type 3, Grade A 50 μinch (min).

www.MICROSEMI.com