

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: www.MICROSEMI.com



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 | °C |
| RF CW Power Handling | P _{CW} | 0.5 | W |

APPLICATIONS/BENEFITS

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

GUARANTEED ELECTRICAL PARAMETERS @ 25°C (unless otherwise specified)

| Model Number | Frequency Range | Insertion Loss ¹ (dB) (Max) | Isolation ¹ (dB) (Min) | VSWR (Max) | Ts ⁴ (nS) (Sw. speed) | |
|--------------|-----------------|---|--------------------------------------|---------------|-------------------------------------|-------------------|
| | | | | | T _{RISE} | T _{FALL} |
| GG72030 – 01 | 0.5 - 4.0 | 0.8 | 60 | 1.5:1 | 30 | 10 |
| GG72030 – 02 | 2.0 - 8.0 | 1.3 | 60 | 1.7:1 | 30 | 10 |
| GG72030 – 03 | 4.0 - 12.4 | 1.8 | 55 | 1.8:1 | 30 | 10 |
| GG72030 – 04 | 8.0 -18.0 | 2.2 | 50 | 1.9:1 | 30 | 10 |
| GG72030 - 05 | 2.0 - 18.0 | 2.3 | 45 | 2.0:1 | 30 | 10 |

Notes:

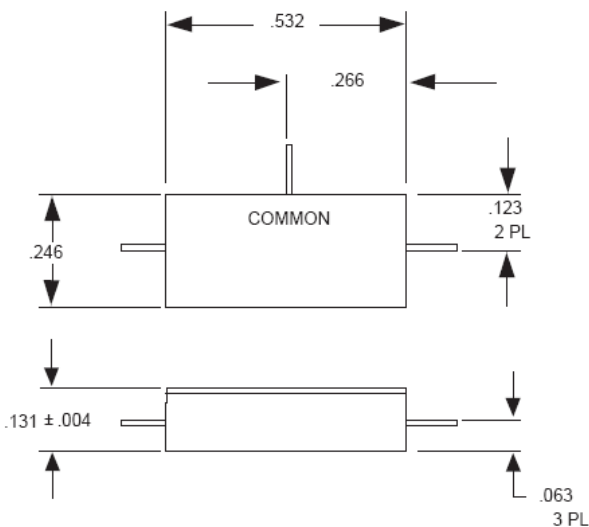
1. RF Power Handling; 0.5W CW.
2. Switching Speed: Rise time, 30nS (max); Fall time, 10nS (max).
3. Required D.C. Bias: Insertion Loss, -35mA; Isolation, +30 mA.
4. Switching Speed is measured from 10%-90% and from 90%-10% of the detected RF pulse with a 2 MHz maximum switching rate.
5. Temperature Rating: Operating, -55 to +95°C; Storage, -55° to +125°C.

ENVIRONMENTAL

These units are designed to meet the following environmental criteria.

ENVIRONMENTAL CONDITIONS

| TEST | MIL-PRF | METHOD | COND. |
|--------------------------------------|---------|--------|-------------|
| Internal Visual | 883 | 2017 | -- |
| Stabilization Bake | 883 | 1008 | B |
| Thermal Cycle | 883 | 1010 | B |
| Constant Acceleration | 883 | 2001 | 1 (Y1 Axis) |
| Burn In | 883 | 1015 | 125 °C |
| Seal – Fine Leak Seal – Fine Leak | 883 | 1014 | A1 C1 |
| External Visual | 883 | 2009 | -- |

OUTLINE 210004
NOTES


1. 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).