NPI MOSFET Module G3VM-66M

New Product Introduction

April 2018

Product Marketing

NEW

The SPDT (1 form C) MOSFET Relay Module
Ideal for replacing Reed Relays in Semiconductor Testing Equipment (ATE) applications.
Long Operating life, High Speed Switching and allows for High Density SMD mounting in its small package: 10x5x11mm

OMRON

Key Features and Benefits

FEATURES	BENEFITS
1 Form C (SPDT):	MOSFET Relay advantages now offered in SPDT form in a compact module
Compact Size: 10x5x11mm	Size Reduction: Reduces Board Mounting Space compared with traditional reed relays
Solid State Technology	-Longer Operating Life -Stronger Resistance to Vibration -Stable Contact Resistance over life of product -Lower Power Consumption
High-Speed Switching	Faster Testing Time
Surface Mount Termination, SMT	Easy Mounting
Fully Customizable with Standard Footprint	Keeps Standard Footprint for design convenience and size reduction while being customizable due to the possibility of changing internal MOSFETs as per customer needs

New Product Main Spec

Characteristics

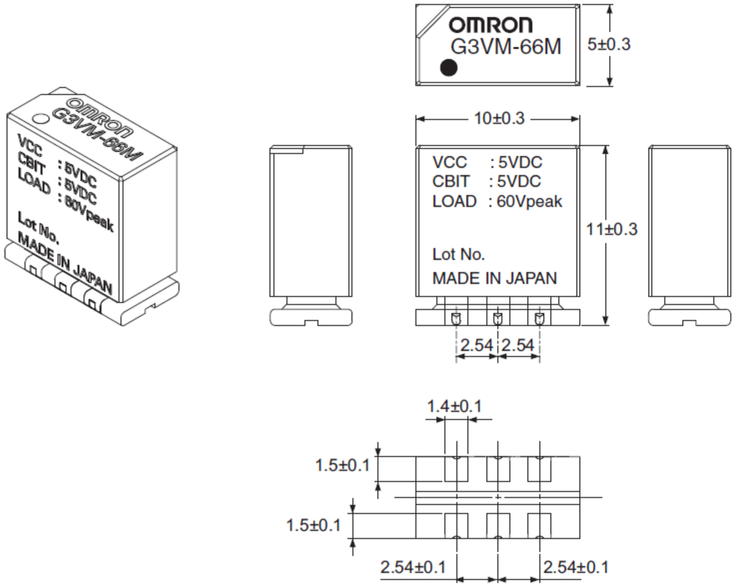
	G3VM−66M
Package	Surface Mount Terminal Type
Contact form	SPDT (1c)
Size	10mm x 5mm x 11mm
Rated Input Voltage	5 VDC
Input current Typ.	7.3 mA
Load voltage (peak value)	60 V
Continuous load current (peak value)	400 mA
Capacitance between I/O terminal Typ.	20 pF
Operate time Typ.	0.3 ms
Release time Typ.	0.1 ms
Dielectric strength between I/O	300 Vrms
Ambient operating temperature	−30 to +80 ℃

New Product Features & Benefits

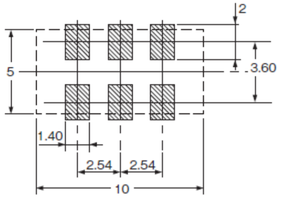
Features

- Operated by voltage (Rated input voltage is 5 VDC.)
- Contributes to mounting space reduction on the print circuit board by having such a small package
- Contact form SPDT (1C)
- Load Voltage 60 V
- Surface-mounting

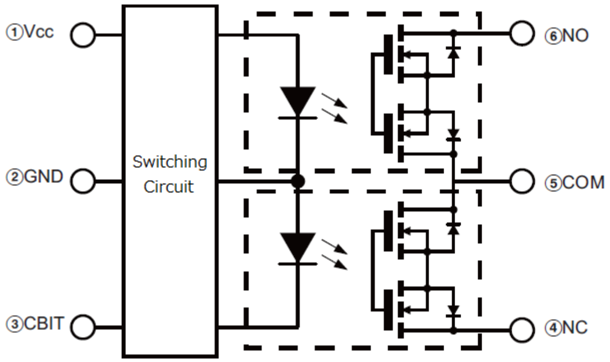
Dimensions



Actual Mounting Pad Dimensions (Recommended Value, Top View)

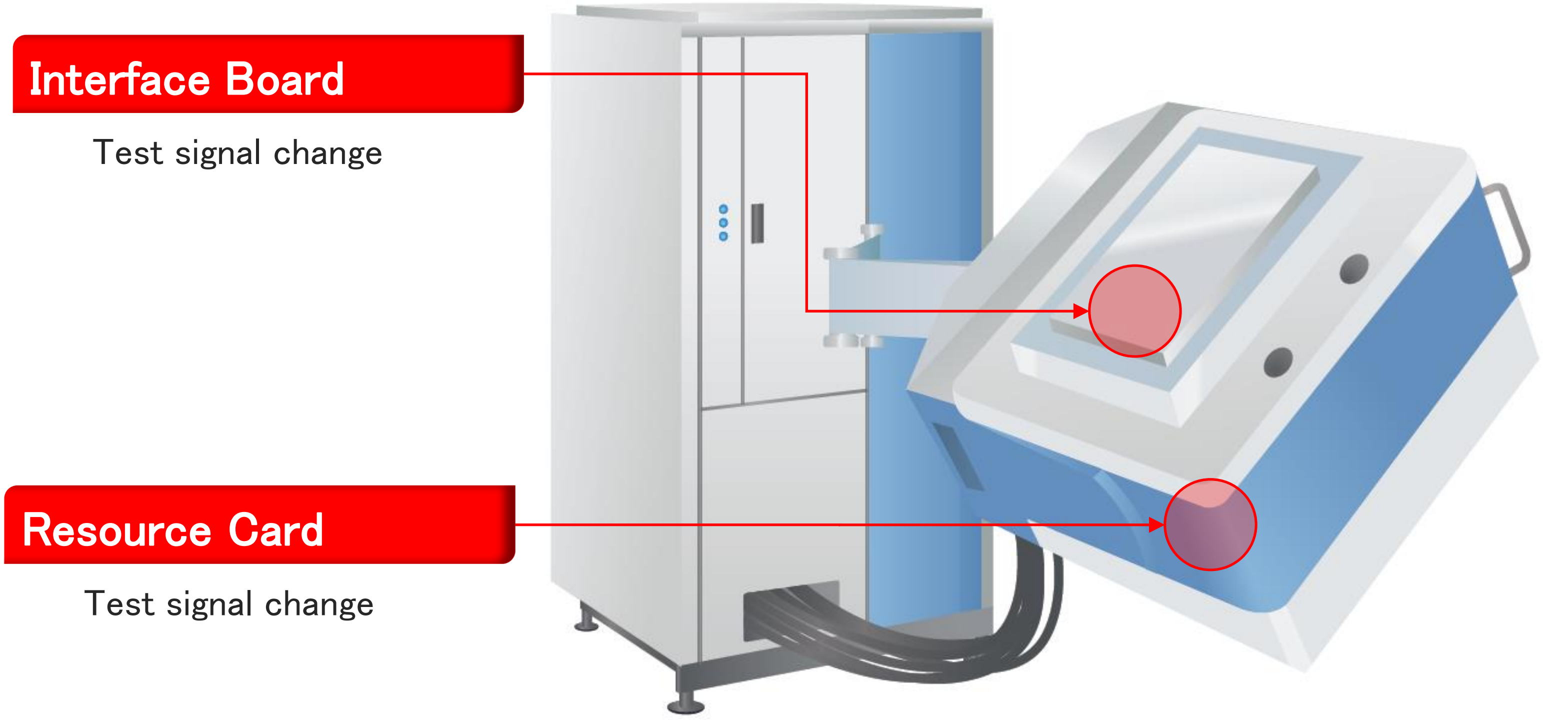


Terminal Arrangement/ Internal Connections (Top View)



Details of Target Application

ATE (Semiconductor Inspection Equipment)



Interface Board

Test signal change

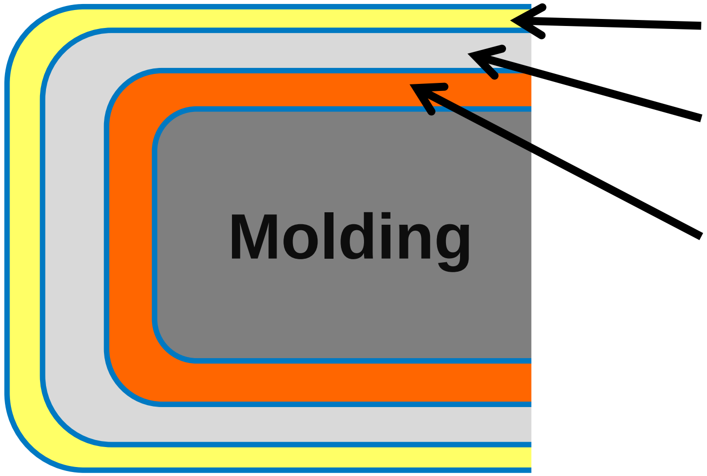
Resource Card

Test signal change

New Product Technology

Adoption of MID technorogy

※MID (Molded Interconnect Device)



Plating : Au

Plating : Ni

Plating : Cu

Key Points:

- **Reduces mounting space**

  …high-density mounting with smaller size than reed relay.

  ＊Mounting space of G3VM-66M is 50mm2 (10mm × 5mm).

- **Longer operating life**

  …Since the output part of the G3VM – 66M uses a semiconductor instead of the movable contact, the contact wear does not occur.

- **Standardized footprint**

  …Internal circuit is customizable with same footprint based on customer requirement.

Thank You