

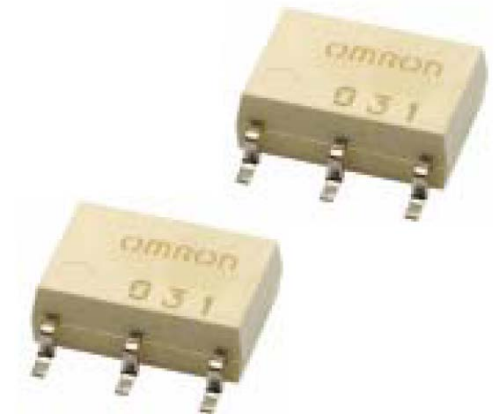
MOSFET SOP6 High Current Capacity type G3VM

New Product Introduction
March 2017

Omron Relay & Devices
Product Marketing

G3VM-31HR/31HR(TR05)

G3VM-101HR1/101HR(TR05)



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Product Introduction

G3VM-HR Now with Larger Current Capacity!

We have made an addition to the product lineup for SOP6 high current capacity series

G3VM-31HR → **30V·4A (8A)**

G3VM-101HR1 → **100V·2A (4A)**

*Values in parentheses are for connection C.

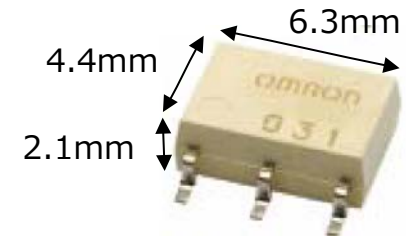
Low quantity package available!

T&R package quantity is 500 pcs.

Ideal for small lot production.

G3VM-31HR Product spec.

◆ 30V, 4A type now available!



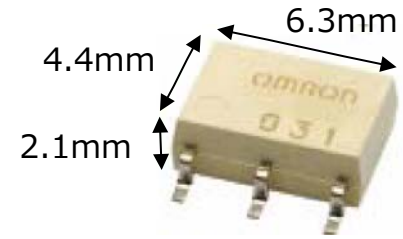
- Features:**
- High switching current with 30V max load
 - Tube and tape and reel package (500 pcs) available

Spec. comparison

		New!		Existing
		G3VM-31HR		G3VM-21HR
Package		SOP6 pin		SOP6 pin
Contact form		1a		1a
Load voltage max.		30V	←	20V
Continuous load current max.		4A(8A)	←	2.5A(5A)
		<small>*Values in parentheses are for connection C.</small>		<small>*Values in parentheses are for connection C.</small>
Resistance with Output ON Max.	Connection A	0.02Ω	←	0.02Ω
	Connection B	0.008Ω	←	0.01Ω
	Connection C	0.004Ω	←	0.005Ω
Trigger LED current Max.		3mA (25°C)	←	3mA(25°C)
Turn-On Time Max.		5.0m s	←	5.0m s
Turn-Off Time Max.		1.0m s	←	1.0m s
Dielectric strength between I/O		1500Vrms	←	1500Vrms
Operating temperature		-40 to +85°C	←	-40 to 85°C

G3VM-101HR1 Product spec.

◆ 100V, 2A type now available!



- Features:**
- High switching current with 100V max load
 - Tube and tape and reel package (500 pcs) available

<u>Spec. comparison</u>		New!	Existing
		G3VM-101HR1	G3VM-101HR
Package		SOP6 Pin	SOP6 Pin
Contact form		1a	1a
Load voltage max.		100V ←	100V
Continuous load current max.		2A(4A) ← <small>*Values in parentheses are for connection C.</small>	1.4A(2.8A) <small>*Values in parentheses are for connection C.</small>
Resistance with Output ON Max.	Connection A	0.045Ω ←	0.1Ω
	Connection B	0.022Ω ←	0.05Ω
	Connection C	0.011Ω ←	0.025Ω
Trigger LED current Max.		3mA (25°C) ←	3mA(25°C)
Turn-On Time Max.		5.0m s ←	5.0m s
Turn-Off Time Max.		1.0m s ←	1.0m s
Dielectric strength between I/O		1500Vrms ←	1500Vrms
Operating temperature		-40 to +85°C ←	-40 to 85°C

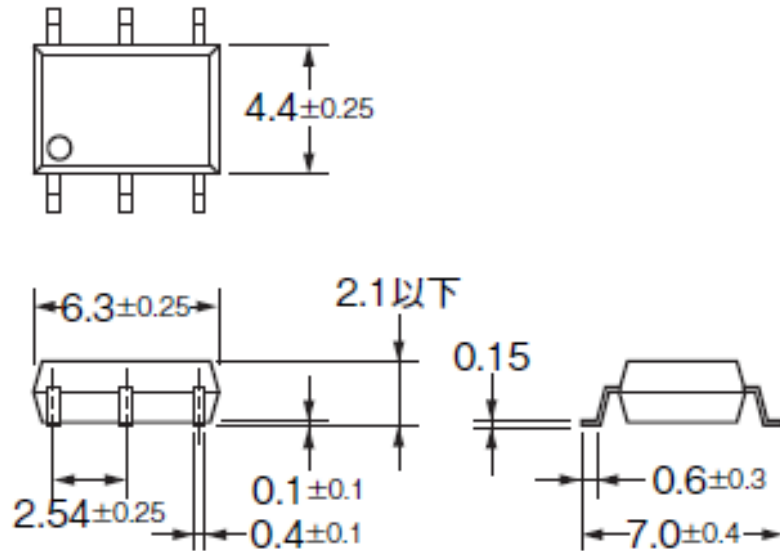
How to connect

By using connection type C the DC load **Current Capacity** could be **Doubled!**

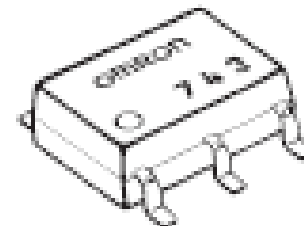
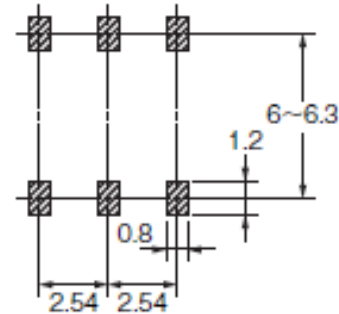
Type	Connection pattern	Explanation
Connection A		Basic connection for AC or two way DC load
Connection B		Connection only for DC load. *There is a specific polarity. The capacitance between terminals (C OFF) is the same with Connection A. The On resistance is the half of Connection A. The rated current is the same with Connection A.
Connection C		Connection only for DC load. *There is a specific polarity. The capacitance between terminals (C OFF) is double of Connection A. The On resistance is one fourth of Connection A. The rated current is double of Connection A.

Dimensions

Dimensions



Actual Mounting Pad Dimensions (Recommended Value, Top view)



Target applications

◆ We offer the new MOSFET relays for many applications

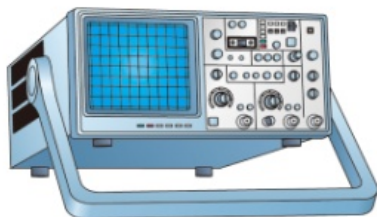
Such as:

Automated test equipment, security, communication, factory automation, and power supply.

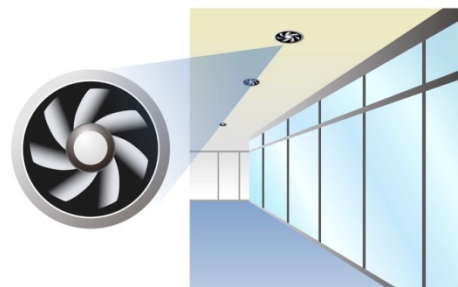
Factory Automation,
Industrial
(I/O control)



Test equipment



Building Automation
(HVAC control)



Security

(output control)



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Evaluation Samples Available

Thank you!

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