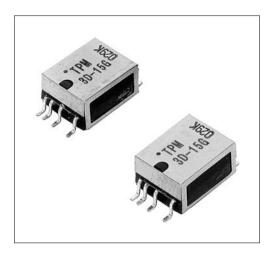


# **Microminiature Surface Mount Reed Relay (2)**

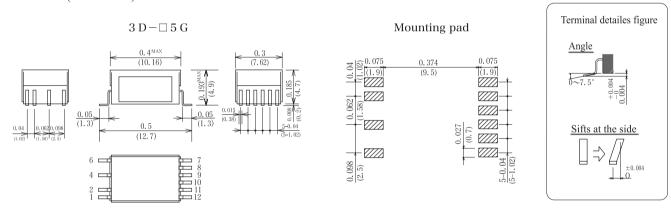


The 1 and 3 Series features the smallest 1 Form C and 2 Form A relays in the Sanyu SMT product line. These relays provide the high-cycle support demanded by the ATE and measurement instrument industries. 3D series has established the contact form 1 Form C (break before make action Form C) in the SMT product line, its much longer life up to  $3\times10^8$  compared with exactly Form C relays. 1D series had completed individual coil drive in the SMT product line.

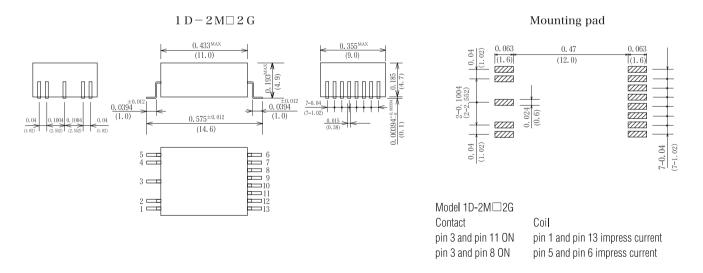
The both series have completely established high RF performances and  $50\Omega$  impedance with Coaxial Shield.

### **Mechanical Dimensions**

All dimensions are measured in inches (millimeters).



Please let our Sales Department know when the packing with tape-and-reel for 3D type will be needed.



Please contact to our Sales Department when you need Model 1D-2M □2G.



1D, 3D Series			Model Number		Model Number	
			3D-□5G		1D-2M□2G	
Parameters	Test Condition	Units	1 Form C		2 Form A	
Coil Specification	S					
Nominal coil voltage Coil resistance Operating voltage Operating voltage range Release voltage	±10%at20°C 15°C~35°C 15°C~35°C 15°C~35°C	VDC Ω VDC Max VDC VDC Min	5 110 3.75 3.75/5.5 0.7	12 550 9.6 9.6/13.2 1.2	5 150 3.75 — 0.7	12 500 9.6 — 1.2
Contact Ratings						
Switching voltage Switching current Carry current Contact rating Life expectancy Contact resistance Contact resistance stability	Max. DC/Peak AC resistance Max. DC/Peak AC resistance Max. DC/Peak AC resistance Max. DC/Peak AC resistance 1V. 10mA Maximum initial Maximum initial	Volts Amps Amps Watts ×10°cycles mΩ mΩ	50 0.2 0.5 5 300 150 5.0			
Relay Specifications						
Insulation resistance Capacitance Across open contacts	Between all isolated pins at 100V 20°C 40%RH Shield guarding	Ω pF-Typ	10 <sup>11</sup>		10 <sup>11</sup>	
Contact to Shield  Open contact to coil  Dielectric strength	Contacts open, Shield floating Shield guarding Between contacts	VDC	4.0 2.5 0.3 150 150		.5	
Operating time (Including. bounce) Release time	Contacts to shield At nominal coil voltage, 100Hz Square wave Diode suppression	msec msec	150 0.5 0.5 0.5 0.5		50 5	
Environmental Ratings Mesurement reference conditions Temp.: 15°C~35°C Humidity: 25%~85%RH Atmospheric pressure: 860~1060hPa Storage temp.: —40°C~+80°C Operating temp: —20°C~+60°C The operating and Release Voltage and the coil resistance are specified at 20°C. These values change approximately 0.4%/°C change in the ambient temperature. Vibration: 20Gs to 2000Hz Shock: 50Gs		Schematics Top view	12(-) 11 10		13 12 11 10	9 8 7 6

#### Notes:

- (1) Values are specified with a resistive load being applied. A contact protective circuit is required for C and L type loads.
- (2) The values for the operating time and release time however, are when the rated coil voltage is applied and a clamp diode is attached.
- (3) Surface mount component processing temperature: 446°F (230°C) max. for 10 seconds dwell time. Temperature is measured at leads where they exit the package.
- (4) The relays monted in the Model 3D-fuuly obsrave the (+) and (-) polarity designations of the coil drive voltage.
- Please contact sales department the availabilities of terminal style J-Lead.

#### **ORDERING CODE**

$$3D - \square 5G$$

Example 3D-15G Represents Series 3D with 1Form 1A+1B=1C Dry Reed (Rhodium), Coil Voltage 5V, Coaxial Shield, Magnetic Shield and Terminal Style Gull-Wing.

(1) Coil Voltage 1-5VDC 2-12VDC

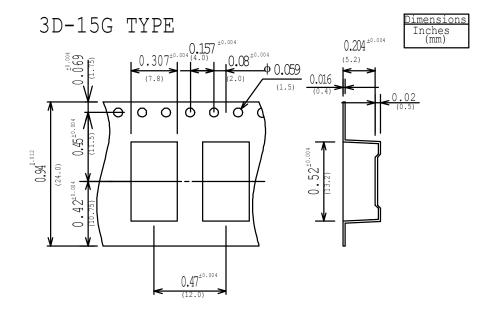
$$1 D - 2 M \square 2 G$$

Example 1D-2M12G Represents Series 1D with 2Form A Dry Reed (Rhodium), coil voltage 5V, Coaxial Shield and terminal style Gull-Wing.

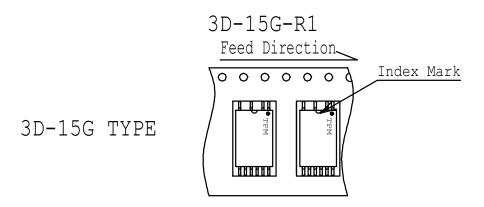
(1) Coil Voltage 1-5VDC 2-12VDC



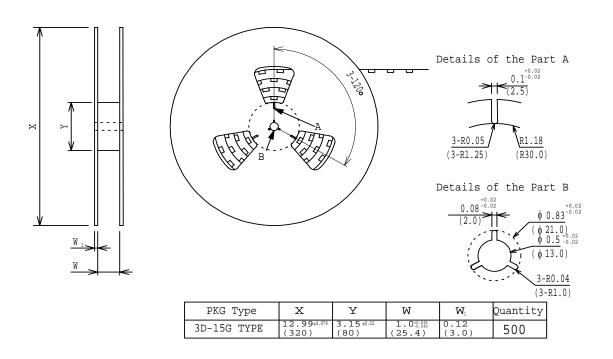
## Tape shape & dimensions



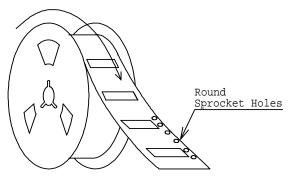
## Device mounting directions



### Reel shape & dimensions







Packaging conforms to EIA standard EIA-481-2 or EIA-481-3.