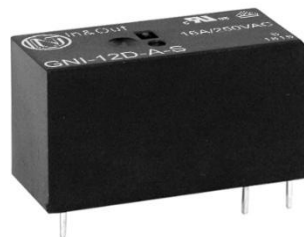


● Features

- High inrush: TV-5 80A (NO contact, at 125VAC)
- Low height: 15.7 mm
- Creepage distance: 10mm
- 5kV dielectric strength (between coil and contacts)
- Plastic sealed and flux proofed types available
- UL insulation system: Class F
- Environmental friendly product (RoHS compliant)
- Dimensions: 29.0 x 12.7 x 15.7 mm



● Application

- Household Electrical Appliance / Automation System / Electrical Equipment / Instrument / Meter / Telecommunication Facilities / Remote Control Facilities, etc.

● Contact Data

Contact Arrangement	1A, 1C
Contact Material	Ag Alloy
Contact Rating	16A 250VAC
Inrush Rating (120VAC)	NO: TV-5 80A 120A / 20ms
Max. Switching Power	4000VA
Max. Switching Voltage	440VAC
Max. Switching Current	16A
Contact Resistance	$\leq 100\text{m}\Omega$
Electrical Endurance	7.5×10^4 (1 Form A type: 16A 250VAC, General use, Room temp., 1s on 9s off) 2.5×10^4 (1 Form A type: TV-5 120AC, Room temp., 1s on 59s off)
Mechanical Endurance	1×10^7

● Coil Parameter

Coil Voltage (VDC)		Coil Resistance ($\Omega \pm 10\%$)	Pickup Voltage(max) (VDC)	Release Voltage(min) (VDC)	Coil Power Consumption (W)
Rated	Max.				
5	7.5	62	3.50	0.5	0.40
6	9.0	90	4.20	0.6	
9	13.5	202	6.30	0.9	
12	18.0	360	8.40	1.2	
18	27.0	810	12.6	1.8	
24	36.0	1440	16.8	2.4	
48	72.0	5760(1 \pm 15%)	33.6	4.8	
60	90.0	7500(1 \pm 15%)	42.0	6.0	
110	165.0	25200(1 \pm 15%)	77.0	11.0	

● Operation Condition

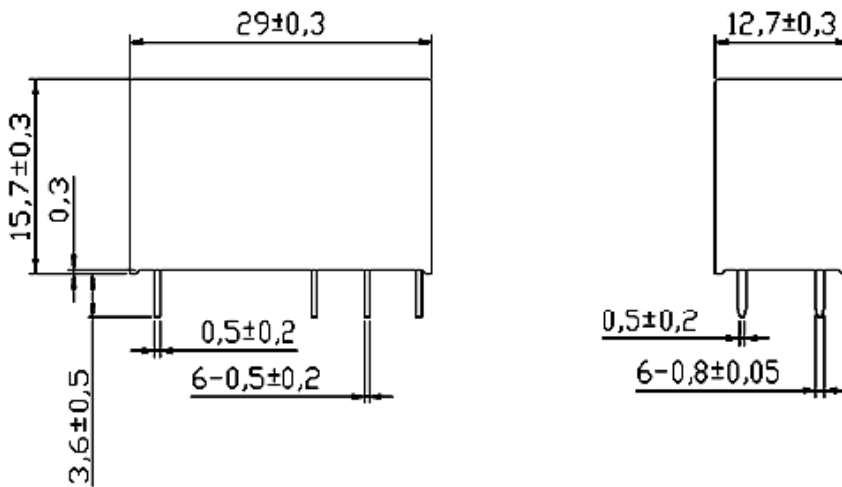
Insulation Resistance		1000M Ω min (at 500VDC)
Dielectric Strength	Between Coil and Contacts	5000VAC 1min
	Between Open Contacts	1000VAC 1min
Surge Voltage (Between Coil & Contacts)		10kV (1.2 / 50 μ s)
Shock Resistance	Functional	98m/s ²
	Endurance	980m/s ²
Temperature Rise (at Nomi. Volt.)		$\leq 85K$
Vibration Resistance		10Hz to 150Hz 20g / 5g
Ambient Temperature		-40 ~ +85 $^{\circ}C$
Operate Time		$\leq 15ms$
Release Time		$\leq 8ms$
Relative Humidity		5%~85%
Weight		Approx. 13.5g

● Ordering Information

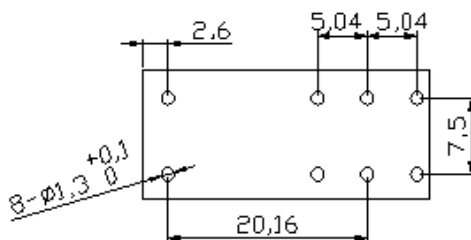
	GNI	-12D	-A	-S	(XXX)
Model					
Coil Voltage	5, 6, 9, 12, 18, 24, 48, 60, 110VDC				
Contact Arrangement	A: 1 Form A C: 1 Form C				
Construction	Nil: Flux tight S: Sealed				
Special Code	Nil: Standard XXX: Customer special requirement				

● Dimensions (UNIT: mm)

Outline Dimensions



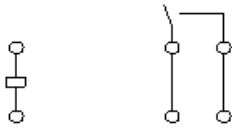
Mounting (Bottom views)



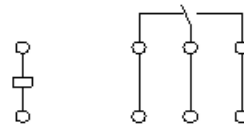
● Dimensions (UNIT: mm)

Wiring Diagram (Bottom views)

1 Form A

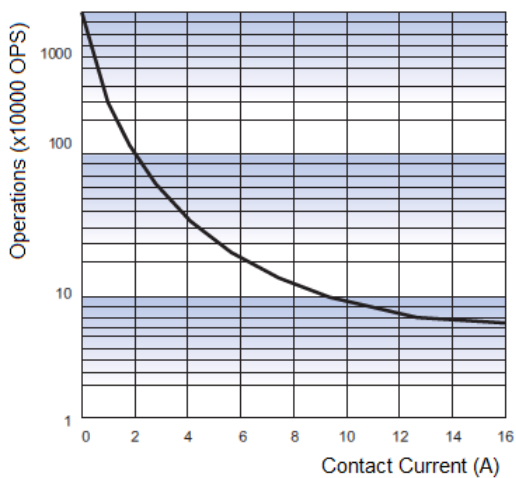


1 Form C

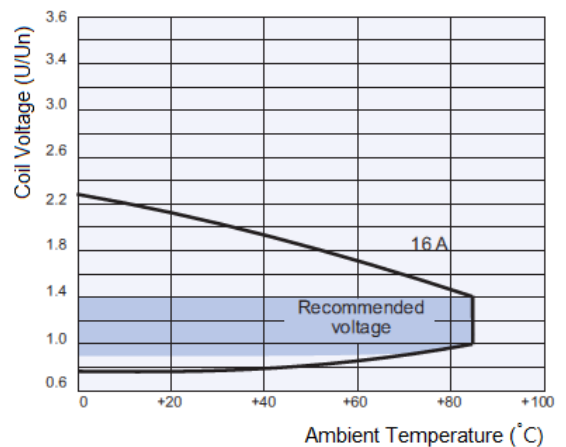


● Engineering Data

Endurance Curve



Coil Operating Range (DC)*



Test conditions:

NO, 250VAC, Resistive load, Flux proofed, Room temp., 1s on 9s off.

Notes: *The use of a relay with an energizing voltage other than the rated coil voltage may lead to reduced electrical life. An energizing voltage over the above range may damage the insulation of relay coil.