

GENERAL CONTROL RELAY

ETR GCJ SERIES

■ FEATURES

- Slim size with 10A switching current.
- Low power consumption 200 mW with Dielectric Strength up to 4,000VAC.
- UL Class F insulation available.
- Halogen Free series available.
- Comply with RoHS and REACH regulations.

■ SAFETY STANDARD

UL&CUL E141060 UL 508

Model	Load	Cycles
GCJ-DM	AgNi & AgSnO ₂ contact	
	5A, 277Vac, 85°C, General	100K
	5A, 30Vdc, 85°C, General Use	100K
	1/8HP, 250Vac, 85°C	1K
GCJ-DMN(S)	AgSnO ₂ contact	
	10A, 277Vac, 85°C, General	10K
	10A, 24Vdc, 85°C, L/R=0	10K

VDE 40026954 IEC 61810-1

Model	Load	Cycles
GCJ-DM	AgNi & AgSnO ₂ contact	
	5A, 250Vac, 85°C, cosφ=1	10K
	3A, 250Vac, 105°C, cosφ=1	50K

TUV R50742916 IEC 61810-1

Model	Load	Cycles
GCJ-DMN(S)	AgSnO ₂ contact	
	10A, 277Vac, 85°C, cosφ=0.75	10K
	10A, 24Vdc, 85°C, L/R=0	10K

TUV R50742916 IEC 62368-1

Model	Load	Cycles
GCJ-DMN(S)	AgSnO ₂ contact	
	10A, 277Vac, 85°C, cosφ=0.75	10K
	10A, 24Vdc, 85°C, L/R=0	10K

TUV R50742916 IEC 60730-1

Model	Load	Cycles
GCJ-DMN(S)	AgSnO ₂ contact	
	10A, 277Vac, 85°C, cosφ=0.75	10K
	10A, 24Vdc, 85°C, L/R=0	10K

■ SPECIFICATIONS(AT INITIAL VALUE)

Contact Resistance	100 mΩ Max. @1A, 6VDC
Operate Time	10 mSec. Max.
Release Time	4 mSec. Max.
Dielectric Strength	Between Coil & Contact: 4,000VAC at 50/60Hz for one minute Between Contacts: 1,250VAC at 50/60Hz for one minute
Surge Strength	7,000V (between coil & contact 1.2x50μSec.)
Insulation Resistance	1,000MΩ Min. at 500VDC
Max. On/OFF Switching	Electrical: 6 cycles per Minute Mechanical: 300 cycles per Minute
Temperature Range	-30°C~+85°C
Humidity Range	5~85%RH
Coil Temperature Rise	45°C Max.
Vibration	Destruction: 10 to 55 to 10 Hz, 0.75 mm single amplitude (1.5mm double amplitude) Malfunction: 10 to 55 to 10 Hz, 0.75 mm single amplitude (1.5mm double amplitude)
Shock	Destruction: 1,000 m/s ² Malfunction: 100 m/s ²
Mechanical Life	5x10 ⁶ operations at no load condition.
Weight	About 4.0g

■ COIL SPECIFICATION AT 20°C

Coil Sensitivity	Nominal Voltage (VDC)	Nominal Current (mA)	Coil Resistance ($\Omega \pm 10\%$)	Power Consumption (W)	Pull-In Voltage (VDC)	Drop-Out Voltage (VDC)	Max. Allowable Voltage (VDC)
GCJ	3	66.7	45	Abt. 0.2	75% Max.	5% Min.	130%
	5	40.0	125				
	6	33.3	180				
	9	22.2	405				
	12	16.7	720				
	15	13.3	1,125				
	18	11.1	1,620				
	24	8.3	2,880				

■ PART NUMBER SYSTEM

ETR - GCJ - SH - 1 12 D M N 1 F - A H Z

· Z: RoHS Compliant

Material requirements

Nil: Standard

H: Halogen Free

IEC/EN 60335-1 (GWT 850 °C / 750 °C)

Nil: Standard

A: IEC 60335-1 Glow wire test available

Insulation System

Nil: Standard Class A

F: Class F

Rated Carrying Current

Nil: Standard

1: 10A (Contact Material available AgSnO₂)

Contact Material

Nil: AgNi

N: AgSnO₂

S: AgSnO₂ Gilded

Contact Form

M: One Form A

Coil Type

D: Standard DC Coil

- Coil Voltage

03: 03V, 05: 05V, 06:06V, 09: 09V, 12: 12V,
15: 15V, 18: 18V, 24: 24V

Number of Pole

1: One Pole

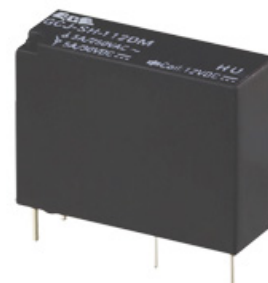
Type of Sealing

SS: Flux Proofed Type

SH: Plastic Sealed Type

Model Name: GCJ

Series Name: ETR

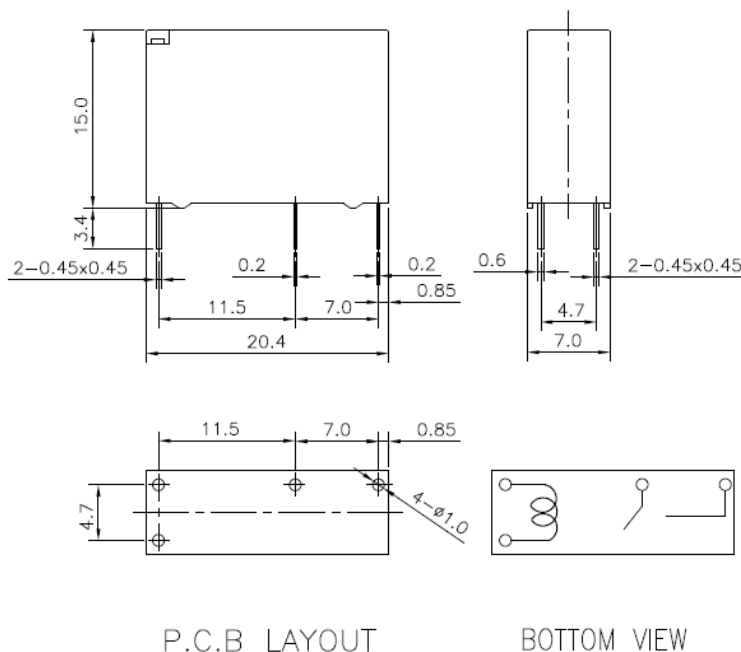


*** Marking without: “ETR” & “Z”.**

* When ordering 10A, please choose DMN1 or DMS1 TYPE

■ **DIMENSIONS** ($\leq 5\text{mm} \pm 0.2\text{mm}$, $> 5\text{mm} \pm 0.3\text{mm}$, the tolerance of PCB thru hole: $+0.1\text{mm}$)

DM(*) (5Amp)



DMN(S)1 (10Amp)

