



**Rely on ECE's Relays,  
and You Always Relax!**

## GENERAL CONTROL RELAY ETR GZR SERIES

### ■ FEATURES

- 8mm clearance and creepage distance.
- Slim size with high capacity up to 25A.
- Dielectric Strength 5,000 VAC. Surge resistance (7000V).
- Class F insulation system.
- Halogen free series available.
- Comply with RoHS and REACH regulations.

### ■ SPECIFICATIONS

Contact Resistance	Max. 100mΩ at initial value. @1A,6VDC	
Contact Capacity	GZR (LM/DM)	20 Amps at 277VAC Cosφ=1 20 Amps at 30VDC L/R=0 1HP 250VAC TV-10 120VAC
	GZR (L/D)	20 Amps at 277 VAC Cosφ=1. (N/O) 16 Amps at 277 VAC Cosφ=1. (N/C) 20 Amps at 30 VDC L/R=0. (N/O) 16 Amps at 30 VDC L/R=0. (N/C) 1HP 250VAC TV-10 120VAC (N/O)
Operate Time	15m Sec. Max.	
Release Time	5m Sec. Max.	
Dielectric Strength	Between coil & Contact: 5000VAC at 50/60Hz for one minute Between Contacts: 1000VAC at 50/60Hz for one minute	
Insulation Resistance	1000MΩ Min. at 500VDC	

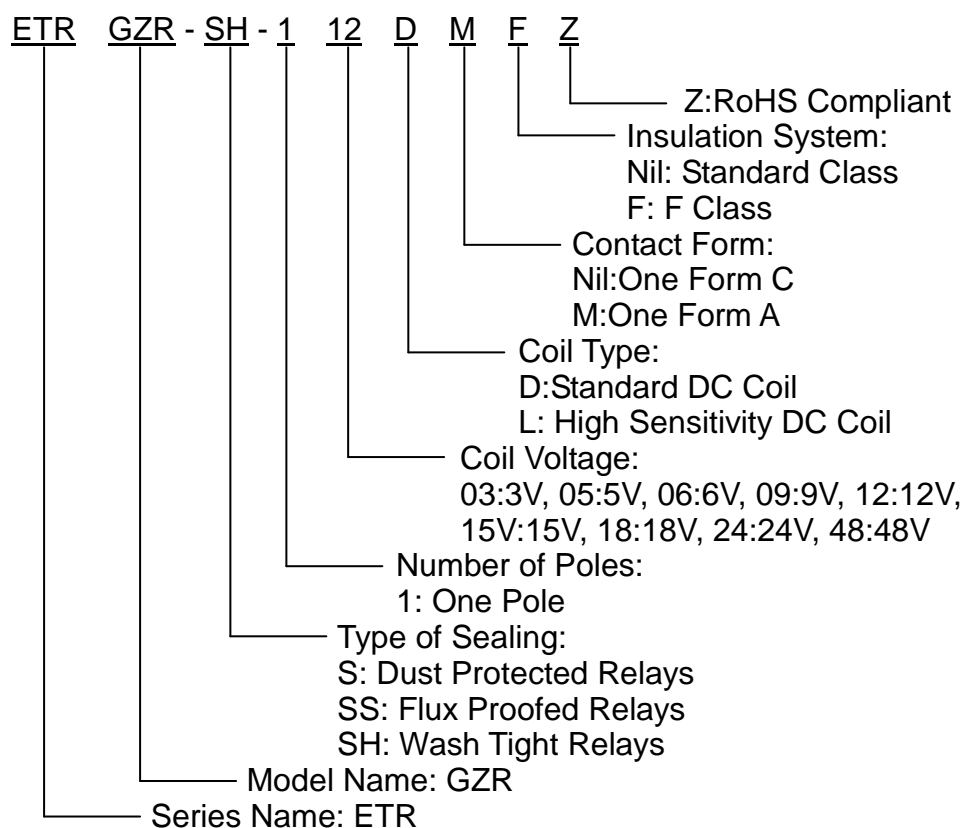
### ■ COIL SPECIFICATION AT 20°C

Coil Sensitivity	Nominal Voltage (VDC)	Nominal Current (mA)	Coil Resistance (Ω±10%)	Power Consumption (W)	Pull-In Voltage (VDC)	Drop-Out Voltage (VDC)	Max. Allowable Voltage (VDC)
GZR D/DM	3	240	13	Abt. 0.72	70% Max.	15% Min.	130%
	5	144	36				
	6	120	50				
	9	80	112.5				
	12	60	200				
	15	48	313				
	18	40	450				
	24	30	820				
	48	15	3,300				



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)
GZR L/LM	3	176.7	17	Abt. 0.53	70% Max.	15% Min.	130%
	5	106	47				
	6	88.3	68				
	9	58.8	155				
	12	44.2	275				
	15	35.3	425				
	18	29.4	612				
	24	22.08	1,100				
	48	11.04	4,170				

## ■ PART NUMBER SYSTEM



**\*Marking without: "ETR" & "Z".**

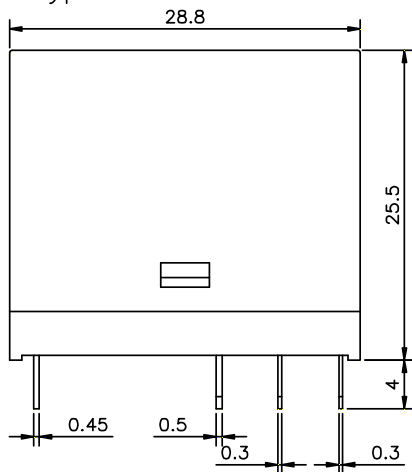
**ETR GZR-S-112L**



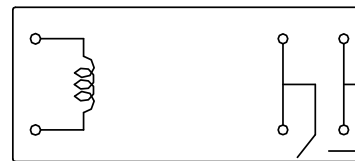
**■ DIMENSIONS** ( $\leq 5\text{mm} \pm 0.2\text{mm}$ ,  $> 5\text{mm} \pm 0.3\text{mm}$ , the tolerance of PCB thru hole:  $+0.1\text{mm}$ )

ETR GZR

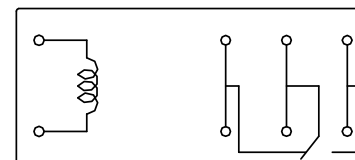
S type



One Form A

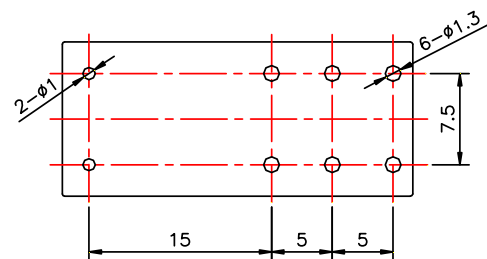
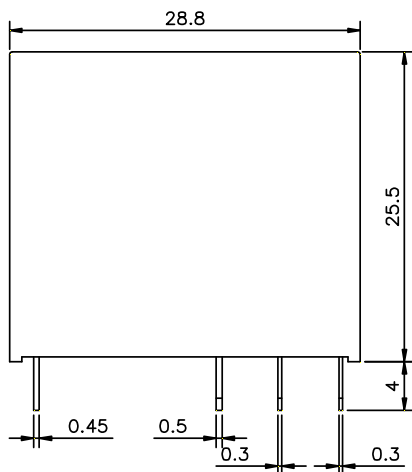


One Form C



BOTTOM VIEW

SS/SH type



P.C.B. LAYOUT