



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

## GENERAL CONTROL RELAY ETR MI-2P SERIES

### ■ FEATURES

- Switching capacity 5A with two changeover contacts.
- Insulation distance of 8mm Min. is designed.
- Dielectric strength of 5,000V min. and surge strength 10,000V.
- 1/8 horse power at 120VAC and 1/8 horse power at 250VAC are certified by UL.
- TV-3 at 120VAC rating is approved by UL.
- Halogen free series available.
- UL Class F insulation available.
- Comply with RoHS and REACH regulations.

### ■ SPECIFICATIONS

Contact Resistance	Max. 100mΩ at initial value. @1A,6VDC
Contact Capacity	5 Amps at 250VAC Cosφ=1 5 Amps at 30VDC L/R=0 TV-3 at 120VAC
Operate Time	15m Sec. Max. (D Type) 20m Sec. Max. (L Type)
Release Time	8m 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	100MΩ Min. at 500VDC

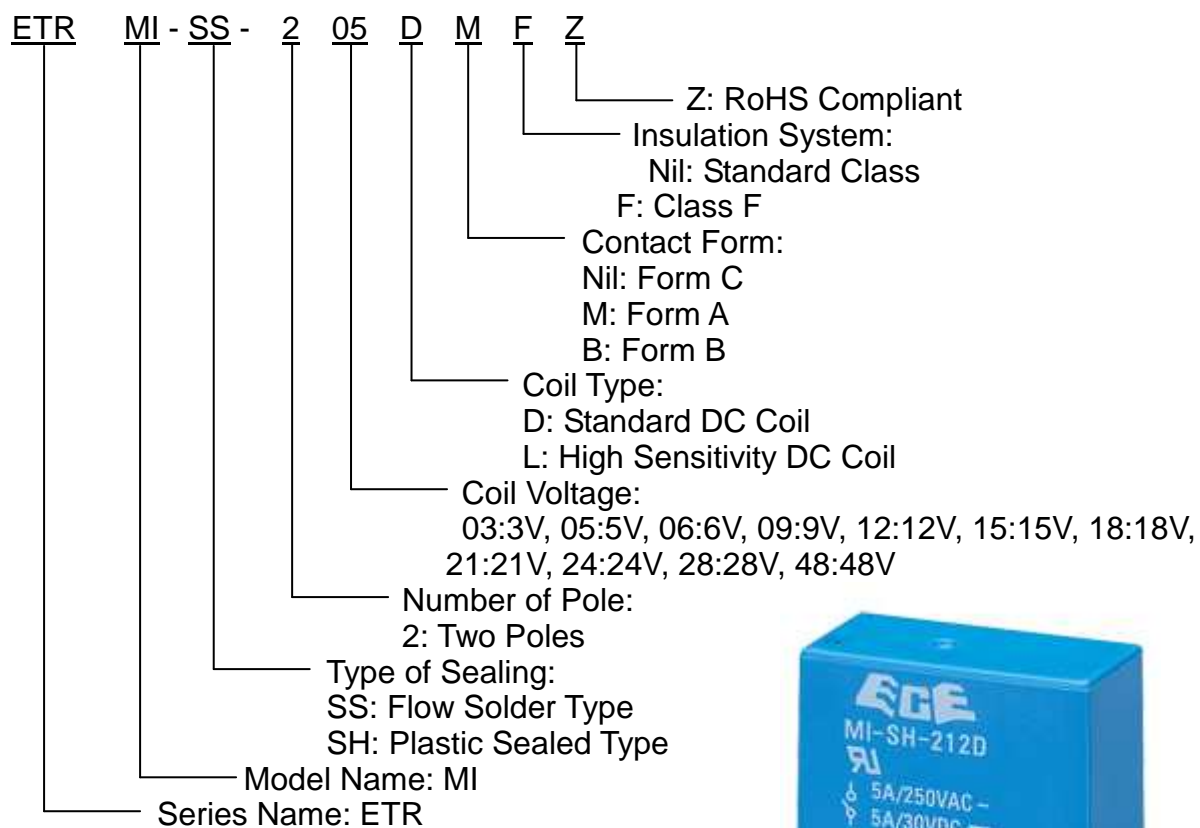
### ■ COIL SPECIFICATION AT 20°C

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)
MI-2P D/DM/DB	3	240	12.5	Abt. 0.72	80% Max.	5% Min.	130%
	5	138.9	36				
	6	120	50				
	9	78.3	115				
	12	60	200				
	15	48	313				
	18	38	470				
	21	34.3	612.5				
	24	29.3	820				
	28	25.7	1,089				
48	14.5	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)
MI-2P L/LM/LB	3	176.5	17	Abt. 0.54	80% Max.	5% Min.	130%
	5	100	60				
	6	88	68				
	9	58	155				
	12	44.4	270				
	15	36	417				
	18	30	600				
	21	25.7	817				
	24	21.8	1,100				
	28	19.3	1,452				
	48	10.9	4,400				

### ■ PART NUMBER SYSTEM



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

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

