

# FRM18 RELAY

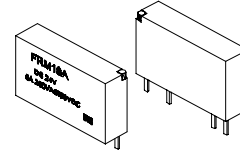


## Miniature Slim Type Relay

### FEATURES

Small Size & Slim Type (5mm wide & 12.5mm High)  
 Switching capacity up to 5A  
 2KV Dielectric Strength  
 High Sensitivity 0.12W  
 Fully sealed type

& VDE



### SPECIFICATIONS

#### COIL RATING

RATED VOLTAGE V DC	COIL RESISTANCE $\Omega \pm 10\%$	RATED CURRENT (mA)	MUST OPERATE VOLTAGE	MUST DROPOUT VOLTAGE	MAXIMUM VOLTAGE	POWER CONSUMPTION (W)
			% OF RATED VOLTAGE (At +20 °C)			
5	208	24	70 Max.	5 Min.	120	0.12W Approx. 0.18W Approx. For 24VDC
6	300	20				
9	675	13.3				
12	1200	10				
18	2700 $\pm$ 15%	6.7				
24	3200 $\pm$ 15%	7.5				

### CHARACTERISTICS

Contact Arrangement	SPST( 1 Form A)
Contact Material	Silvery Alloy
Contact Resistance	< 50m $\Omega$ (At 1A 6VDC)
Contact Rating (Resistive Load)	5A 250VAC/ 30VDC
Max. Switching Voltage	AC 250V/ DC 110V
Max. Switching Power	1250VA/ 150W
Operate Time (Initial)	10ms Max.
Release Time (Initial)	5ms Max.
Insulation Resistance	1000M $\Omega$ Min. (at 500V DC)
Dielectric Strength	1000V AC (50Hz/min.) Between open contacts 2000VAC (50Hz/min.) Between coil and contact
Surge Voltage	4000V (1.2 X 50 $\mu$ s)
Shock Resistance	Functional : 147m/s <sup>2</sup> 11ms Endurance : 980m/s <sup>2</sup> 6ms
Vibration Resistance	1.5mm Double Amplitude 10 - 55Hz
Ambient Temperature	-40°C to +70°C
Humidity	5 - 85% RH
Operation Life	Electrical : 3A : 1x10 <sup>5</sup> 5A : 1x10 <sup>4</sup> Mechanical : 2x10 <sup>7</sup>
Weight	3g Approx.

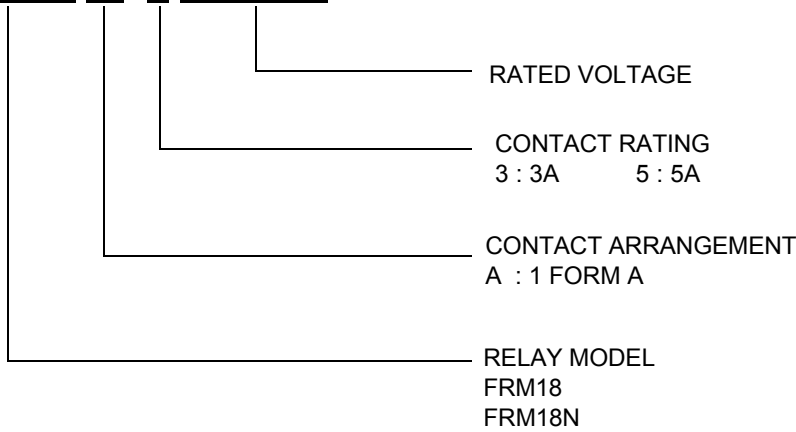
[Specifications are subject to change without notices.]

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## ORDERING INFORMATION

### FRM18 A - 5 DC 12V



Note : Pb-Free and RoHS compliant relays are available.

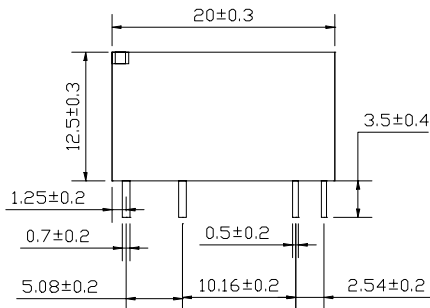
For ordering, please add suffix "Pb-Free" or "RoHS" to standard relay part numbers.

For example : FRM18A-5 DC 12V "Pb-Free" for Pb-Free Relay

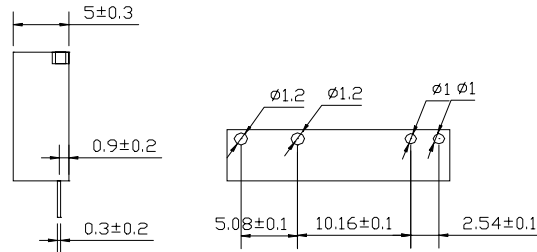
For example : FRM18A-5 DC 12V "RoHS" for RoHS Compliant Relay

## DIMENSIONS (UNIT:mm)

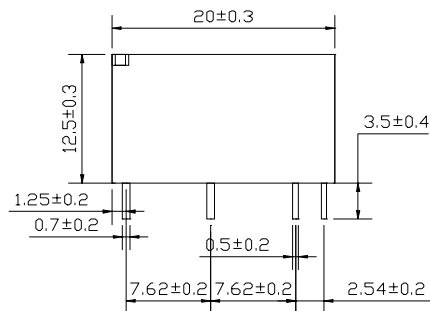
### FRM18



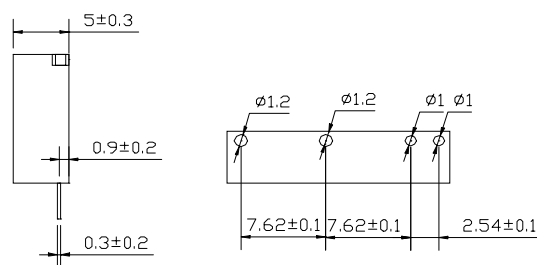
### PCB LAYOUT



### FRM18N



### PCB LAYOUT



## WIRING DIAGRAM

