

Features

Small size and slim type (5mm wide & 12.5mm high)
 Switching capacity up to 5A
 3KV dielectric strength
 High sensitivity 0.12W
 Wash tight type



us: E141516

: 40008356

Ordering information

FRM18 A - 5 DC12V F G					
1	2	3	4	5	6
1 Relay model: FRM18; FRM18N			6 Contact material: NIL; AgNi; N: AgSnO ₂ ;		
2 Contact arrangement: A: 1 Form A			G : Gold plated		
3 Contact rating: 5: 5A			Note: RoHS : RoHS compliant relay		
4 Rated voltage			RoHS-I : AgNi contact		
5 Insulation: NIL: B class; F: F class			RoHS-N: AgSnO ₂ contact		

Coil rating

Rated voltage (V)	Coil resistance Ω±10%	Rated current (mA)	Must operate voltage % of rated voltage (at 20°C)	Must dropout voltage	Maximum voltage	Power consumption (W) Approx.	Operate time (ms)	Release time (ms)
5	208	24	70 Max.	5 Min.	120 Max.	0.12	<10	<5
6	300	20						
9	675	13.3						
12	1200	10						
18	2700±15%	6.7						
24	3200±15%	7.5						

CAUTION: 1. The use of any coil voltage less than the rated coil voltage will compromise the operation of the relay.
 2. Pickup and release voltage are for test purposes only and are not to be used as design criteria.

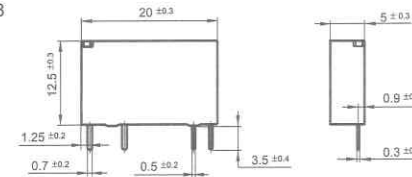
Characteristics

Contact arrangement		SPST (1 Form A)
Contact material		Sliver alloy
Contact resistance		≤100mΩ Max. (at 1A 6VDC)
Contact rating (resistive)		5A 250VAC/30VDC
Switching power		1,250VA / 150W
Switching voltage		AC 250V / DC 30V Max.
Insulation resistance		1,000MΩ Min. (500VDC)
Dielectric strength		1,000VAC (50Hz/min) Between open contacts 2,000VAC (50Hz/min) Between coil and contact (Special: 3,000VAC)
Surge voltage		4,000KV (1.2 x 50μs)
Shock resistance		Functional : 98m/s ² 11ms Destructive: 980m/s ² 6ms
Vibration resistance		1.5mm Double amplitude 10-55Hz
Ambient temperature		-40°C to +85°C
Humidity		85% RH, 40°C
Operation life	Mechanical	2 x 10 ⁷
	Electrical	1 x 10 ⁵
Weight		3g Approx.

(Specifications are subject to change without notices.)

Dimensions

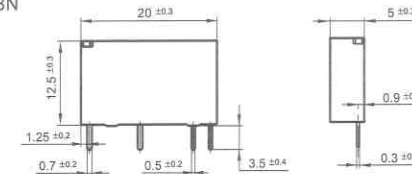
FRM18



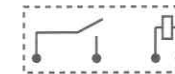
Mounting holes



FRM18N

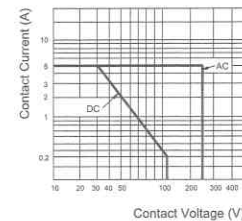


Wiring diagram (Bottom view)

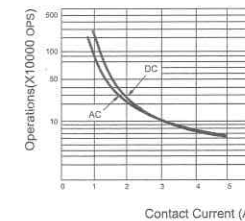


Reference data

MAXIMUM SWITCHING POWER



ENDURANCE CURVE



COIL TEMPERATURE RISE

