# FRS1 RELAY



#### **Subminiature SPDT RELAY**

#### **FEATURES**

Low coil power consumption

Small size and low cost

PCB mounting, DIL pitch terminal

Standard and high sensitive operation use

Dust cover or sealed type

Recognized File No: E141516(N)



#### **SPECIFICATIONS**

#### **COIL RATING**

RATED VOLTAGE	COIL RESISTANCE Ω +/- 10 %			MUST OPERATE VOLTAGE	MUST DROPOUT VOLTAGE	MAXIMUM VOLTAGE	POWER CONSUMPTION
(V DC)	FRS1B	FRS1	FRS1H	% OF R	(W)		
3	20	25	45				
5	56	70	120				FRS1B: 0.45
6	80	100	180	75 Max.	10 Min.	110 Max.	FRS1: 0.36
9	180	220	400				FRS1H: 0.20
12	320	400	700				
24	1280	1600	2800				

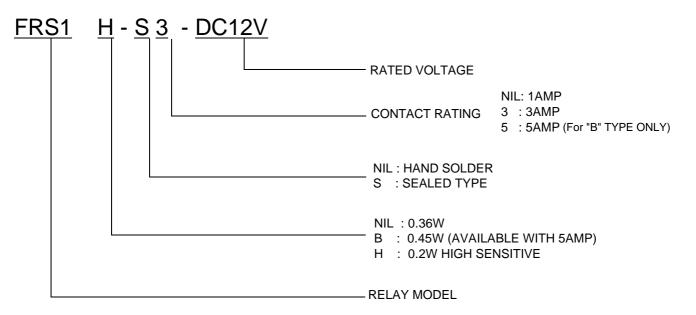
#### **CHARACTERISTICS**

Contact Arrangement	1 Form C (SPDT)	1 Form C (SPDT)			
Contact Material	Silver Alloy (Gold Flash)	Silver Alloy (Gold Flash)			
Contact Resistance	50mΩ Max.	50m $Ω$ Max.			
	FRS1/FRS1H/FRS1B	1A 125VAC / 30VDC			
Contact Rating (Resistive Load)	FRS1-3/FRS1H-3/FRS1B-3	3A 125VAC / 30VDC			
	FRS1B-5	5A 125VAC / 14VDC			
Switching Voltage	DC60V Max. AC220V Max.	DC60V Max. AC220V Max.			
Operate Time (Initial)	5ms Max.	5ms Max.			
Release Time (Initial)	5ms Max.	5ms Max.			
Insulation Resistance	100MΩ Min. ( 500V DC)	100MΩ Min. ( 500V DC)			
Dielectric Strength	500Vrms, 1 minute between open	500Vrms, 1 minute between open contacts			
Dielectric Strength	500Vrms, 1 minute between coil and contact				
Shock Resistance	10g Approx.	10g Approx.			
Vibration	10-55Hz, Double Amplitude 1.5mn	10-55Hz, Double Amplitude 1.5mm			
Ambient Temperature	-25°C to +75°C	-25°C to +75°C			
Operation Life	Mechanical : 10 <sup>7</sup>	Mechanical : 10 <sup>7</sup>			
Operation Life	Electrical : 10 <sup>5</sup>				
Weight	4g Approx.	4g Approx.			

[Specifications are subject to change without notices.]



### **ORDERING INFORMATION**



(i.e. FRS1H-S3-DC12V is a SPDT, high sensitive 0.2W, 3amp, fully sealed and 12VDC coil relay.

## **DIMENSIONS (UNIT:mm)**

