# Power Relays

#### Features

Subminiature light weight relay Surge resistiveness of 5,000V Employment of suitable plastic material for high temperature and various chemical solution Dust cover or wash tight type

Applications: home appliances, audio equipment, office machines, automobiles, etc.

c us: E141516

: R50019143 (For FRS16 only)



# Ordering information

FRS16	Н	Α	- <u>S</u>	05	-1[	)C12\	<b>/</b> - 1	
1	2	3	4	5	6	7	8	

1 Relay model: FRS16; FRS16N 2 Power consumption: B: 0.45W; H: 0.2W (for SPST only) <special request 0.23W for "FRS16NA-10">

3 Contact arrangement: A: 1 Form A; C: 1 Form C 4 Construction: NIL: Dust cover; S: Wash tight type

5 Contact rating: 03: 3A; 05: 5A;

08: 8A (8A 250VAC for SPST only); 10: 10A (FRS16N-10 for SPST only) 6 Termination (only for "N" type): 1: FRS16N-1; 2: FRS16N-2

7 Rated voltage

8 Special high capacity (1 From A only)
Note: RoHS : RoHS compliant relay;
RoHS- I: AgNi contact;

RoHS- I: AgNi contact; RoHS-N: AgSnO<sub>2</sub> contact

## Coil rating

Rated voltage	Coil resistance Ω+/-10%			Must operate voltage	Must dropout voltage	Maximum voltage	Power consumption (W)	Operate time	Release time	
(V)	"B" Type	"Н" Туре	"NBA-10"	"NA-10"	% of rate	ed voltage (a	t +20°C)	Approx.	(ms)	(ms)
3 5 6 9 12 18 24 48	20 55 80 180 320 - 1280 5100	45 125 180 400 720 - 2800	20 55 80 180 320 720 1280 5120	38 108 155 350 620 1390 2480 9920	75 Max.	5 Min.	130 Max.	"B" Type: 0.45 "H" Type: 0.20 (Special: 0.23) (for SPST only)	<8	<5

CAUTION: 1. The use of any coil voltage less than the rated coil voltage will compromise the operation of the relay.

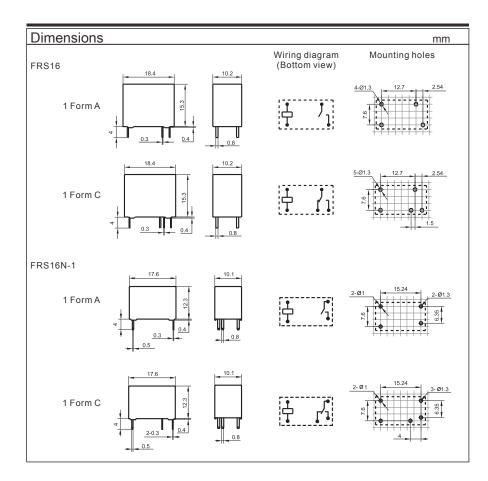
2. Pickup and release voltage are for test purposes only and are not to be used as design criteria.

### Characteristics

Contact arrangement	SPST (1 Form A); SPDT (1 Form C)
Contact material	Silver alloy
Contact resistance	100mΩ Max.
Contact rating (resistive)	FRS16BA: 10A 120VAC 5A 250VAC/28VDC  Lamp load: 5A/250VAC Rush current 80A  FRS16HA & FRS16BC: 5A 120VAC 3A 250VAC/28VDC  Special high capacity: 8A 250VAC (1 Form A only) - (No approval)  FRS16NA-5: 5A 250VAC/30VDC 1/8HP 125VAC/250VAC  FRS16NA-10: 10A 250VAC (No approval)  FRS16NBC: 3A 250VAC/30VDC
Switching power	1,250VA / 150W Max.
Switching voltage	AC 250V / DC 30V Max.
Insulation resistance	100MΩ Min. (500VDC)
Dielectric strength	1,000VAC (50Hz/min) Between open contacts FRS16 : 2,500VAC (50Hz/min) Between coil and contact FRS16N: 5,000VAC (50Hz/min) Between coil and contact
Shock resistance	10g Min.
Vibration resistance	1.5mm Double amplitude 10-55Hz

Ambient temperat	ture	FRS16: -40°C to +70°C; FRS16N: -40°C to +85°C
Humidity		95% RH, 35°C
Operation life	Mechanical	10 <sup>7</sup>
	Electrical	10 <sup>s</sup> (at rated load)
Weight		FRS16: 6g Approx.; FRS16N: 5g Approx.

(Specifications are subject to change without notices.)





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