

# HF3FD

# SUBMINIATURE HIGH POWER RELAY



### Features

- Extremely low cost
- 1 From A and 1 From C configurations
- Subminiature, standard PCB layout
- Sealed IP67 & flux proof types available
- Lead Free and Cadmium Free
- 2.5KV dielectric strength (between coil and contacts)
- Flammability class according to UL94, V-0
- CTI250
- VDE 0631 / 0700
- Environmental protection product available (RoHs & WEEE compliant)

### CONTACT DATA

Contact Arrangement	1A	1C
Initial Contact Resistance Max.	100mΩ (at 1A 6VDC)	
Contact Material	AgSnO <sub>2</sub> , AgNi	
Contact Rating (Res. Load)	10A 277VAC	7A 250VAC 10A 277VAC
Max. switching voltage	277VAC/30VDC	
Max. switching current	15A	10A
Max. switching power	2770VA 210W	
Mechanical life	1 x 10 <sup>7</sup> ops	
Electrical life	1 x 10 <sup>5</sup> ops	

### COIL

Coil power	0.36W
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### COIL DATA

Nominal Voltage VDC	Pick-up Voltage VDC	Drop-out Voltage VDC	Max. allowable Voltage VDC(at 25°C)	Coil Resistance Ω
3	2.25	0.3	3.9	25 ± 10%
5	3.75	0.5	6.5	70 ± 10%
6	4.50	0.6	7.8	100 ± 10%
9	6.75	0.9	11.7	225 ± 10%
12	9.00	1.2	15.6	400 ± 10%
18	13.5	1.8	23.4	900 ± 10%
24	18.0	2.4	31.2	1600 ± 10%
48	36.0	4.8	62.4	6400 ± 10%

### CHARACTERISTICS

Initial Insulation Resistance	100MΩ ,500VDC	
Dielectric Strength	Between coil and contacts	2000VAC/2500VAC, 1min
	Between open contacts	750VAC, 1min
Operate time (at nomi. Volt.)	Max. 10ms	
Release time (at nomi. Volt.)	Max. 5ms	
Temperature rise (at nomi. Volt.)	Max. 60°C	
Shock Resistance	Functional	98 m/s <sup>2</sup> (10g)
	Destructive	980 m/s <sup>2</sup> (100g)
Vibration Resistance	1.5mm, 10 to 55Hz	
Humidity	35% to 85%RH	
Ambient temperature	-40°C to +105°C	
Termination	PCB	
Unit weight	Approx. 10g	
Construction	Sealed IP67 & Flux proof	



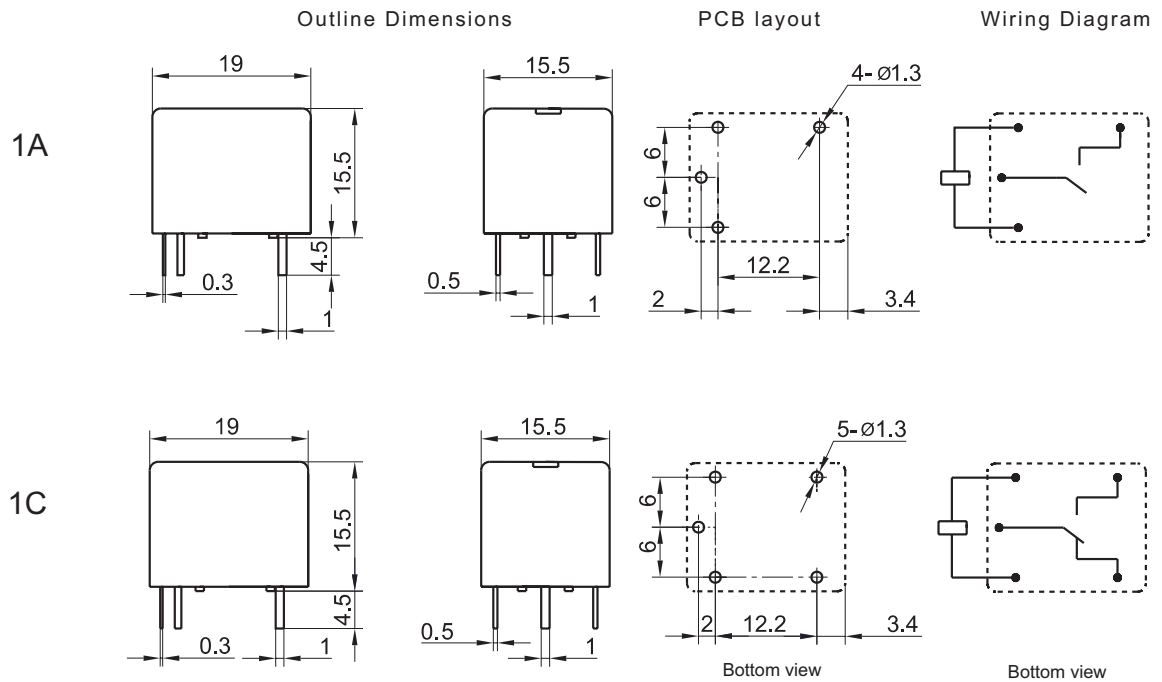
HONGFA RELAY  
ISO9001, ISO/TS16949, ISO14001, OHSAS18001 CERTIFIED

VERSION: EN03-20050301

## ORDERING INFORMATION

		<b>HF3FD /</b>		<b>012</b>		<b>H</b>		<b>S</b>		<b>T</b>		<b>F</b>		<b>XXX</b>	
<b>Type</b>		HF3FD: Dielectric Strength 2000VAC HF3FD-1: Dielectric Strength 2500VAC													
<b>Coil voltage</b>		3, 5, 6, 9, 12, 18, 24, 48VDC													
<b>Contact arrangement</b>		H:1 Form A (SPST-NO)    Z:1 Form C (SPDT)													
<b>Structure</b>		S: Sealed IP67    Nil: Flux proof													
<b>Contact Material</b>		T: AgSnO <sub>2</sub> 3: AgNi													
<b>Insulation System</b>		F: Class F    Nil: Class B													
<b>Special request code</b>		( For example: 551: Lead-free    555: RoHs & WEEE compliant )													

## OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT



## CHARACTERISTICS CURVE

