

HFKW-SH

DOUBLE MAKE CONTACT AUTOMOTIVE RELAY



Typical Applications

Central door lock, Anti-theft lock, Lighting control

Features

- Small size
- Double make contact
- Standard terminal pitch employed
- Extended operation range
- Plastic sealed IP67 type

CONTACT DATA

Contact Arrangement	1U (Double make contact)	
Initial Contact Resistance Max.	100mΩ (at 1A 6VDC)	
Contact Material	AgNi	
Contact Rating	Lamp load	14VDC 2 x 4A
	Resistive load	14VDC 2 x 6A
Max. Carrying current	2 x 20A/2 min.	
Max. Inrush current	48A	
Max. switching power	20A 16VDC	
Min. Applicable load	1A 6VDC	
Mechanical life	1 x 10 ⁷ ops	
Electrical life	2 x 10 ⁵ ops	

COIL

Coil power	1.0 W
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COIL DATA

Nominal Voltage VDC	Pick-up Voltage VDC		Drop-out Voltage VDC	Coil Resistance Ω
	20°C	85°C	20°C	
6	3.5	4.5	0.5	36 ± 10%
9	5.2	6.8	0.7	81 ± 10%
10	5.2	7.9	0.8	100 ± 10%
12	6.9	9.0	1.0	144 ± 10%
24	14	18	1.9	576 ± 10%

CHARACTERISTICS

Initial Insulation Resistance	100MΩ, 500VDC	
Dielectric Strength	Between coil and Contacts	500VAC 1min.
	Between open contacts	500VAC 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	100m/s ²
	Destructive	1000m/s ²
Vibration Resistance	DA:1.5mm, 10 to 55Hz	
Humidity	98% 40°C	
Ambient temperature	-40°C to +85°C	
Termination	PCB	
Unit weight	Gprox. 6g	
Construction	Sealed IP67	



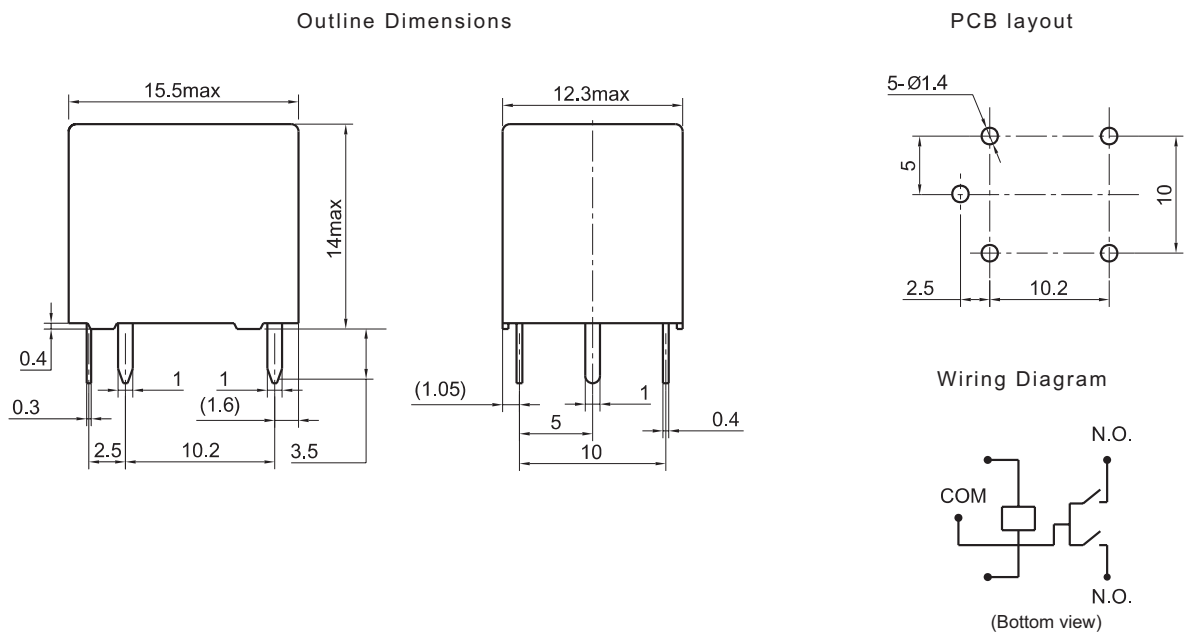
HONGFA RELAY
ISO9001、ISO/TS16949、ISO14001 CERTIFIED

VERSION: EN02-20040601

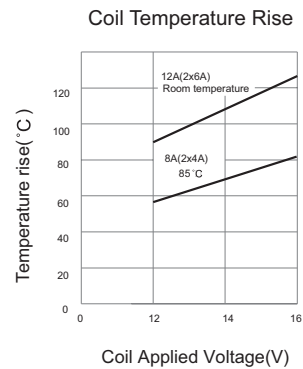
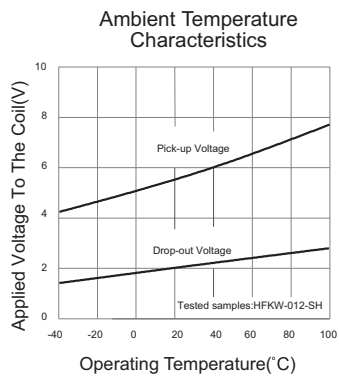
ORDERING INFORMATION

HFKW /		012	SH	XXX
Type				
Coil voltage	6, 9, 10, 12, 24VDC			
Contact arrangement	SH: 1 Form U (Double make contact)			
Customer special request code:				

OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

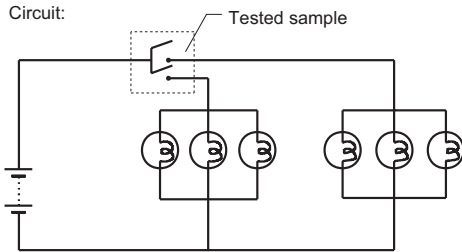


CHARACTERISTICS CURVE

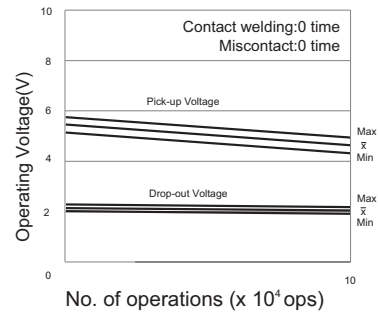


CHARACTERISTICS CURVE

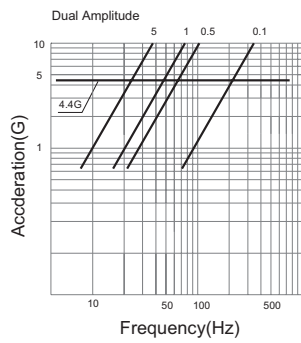
Electrical Life Test (Lamp Load)



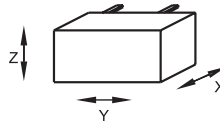
Tested sample: HFKW-012-SH, 6 PCS
 Load: 5A, inrush 48A, 6 x 21W
 Operating frequency: ON 1s, OFF 14s



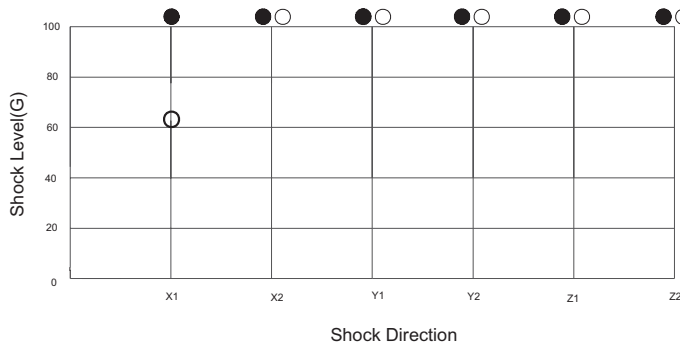
HFKW Vibration Resistance Characteristics



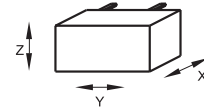
Frequency: 10 to 500 HZ
 Acceleration: 10G Max.
 Direction of Vibration: See Diagram as Following
 Detection Level: 100 us



Shock Resistance Characteristics



Shock Application Time: 11 ms
 Test Material: Coil, Energized & De-Energized
 Shock Direction: See Diagram as following
 Detection Level: 100 us



○ : NC Contact
 ● : NO Contact