

HFKW

SUBMINIATURE AUTOMOTIVE RELAY



Typical Applications

Central door lock, Mirror adjustment, Turning lamp control, Seat adjustment, Power door & windows, Speed-limit indicator control, Warm-up control, Wiper control

Features

- High current contact capacity
(Carrying current: 35A/10min 25A/1h)
- Improved heat resistance
- Extended operation range
- High resistance to vibration and shock
- Two types of contact material

CONTACT DATA

Contact Arrangement	1C	
Initial Contact Resistance Max.	100mΩ (at 1A 6VDC)	
Contact Material	W Type	N Type
	AgSnO ₂	AgNi
Contact Rating (Res. load)	15A 14VDC	
Max. Carrying current	35A/10 min. 25A/1h	
Max. Inrush current	60A	40A
Max. switching power	NO/NC: 35/10A 16VDC	
Max. switching Voltage	60VDC	
Min. Applicable load	1A 6VDC	
Mechanical life	1 x 10 ⁷ OPS	
Electrical life	2 x 10 ⁵ OPS	

COIL

Coil power	0.6W
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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	3.6	4.5	0.5	60 ± 10%
9	5.4	6.8	0.7	135 ± 10%
10	6.3	7.9	0.8	180 ± 10%
12	7.3	9.0	1.0	240 ± 10%
18	10.8	13.5	1.5	540 ± 10%
24	14.4	18.0	2.2	960 ± 10%

CHARACTERISTICS

Initial Insulation Resistance	100MΩ, 500 VDC	
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	100 m/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	Approx. 6g	
Construction	Sealed IP67	



HONGFA RELAY
ISO9001、ISO/TS16949、ISO14001 CERTIFIED

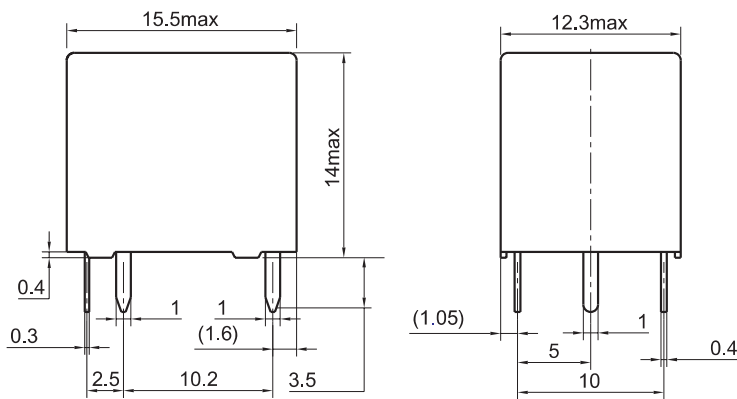
VERSION: EN02-20040601

ORDERING INFORMATION

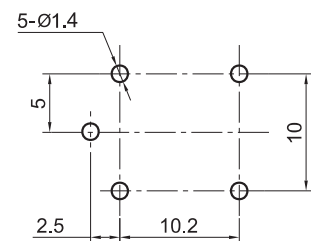
		HFKW / 012 1Z		W	XXX
Type					
Coil voltage	6, 9, 10, 12, 18, 24VDC				
Contact arrangement	1Z: 1C (SPDT)				
Contact Material	W: AgSnO ₂ N: AgNi				
Customer special request code:					

OUTLINE DIMENSIONS, WIRING DIAGRAM AND PCB BOARD LAYOUT

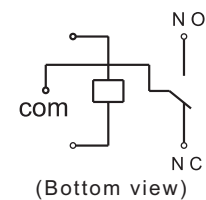
Outline Dimensions



PCB layout

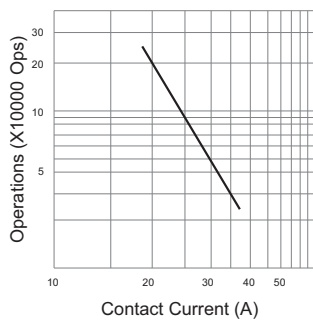


Wiring Diagram

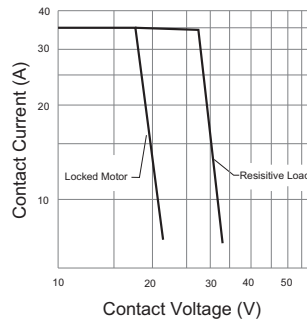


CHARACTERISTICS CURVE

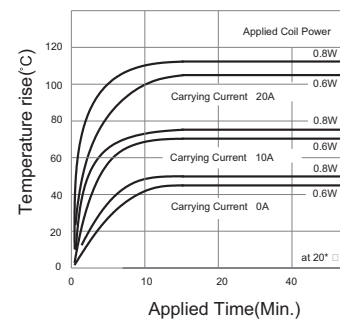
Life Curve



Maximum Swit Ching Power

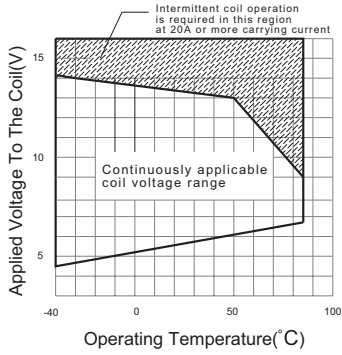


Coil Temperature Rise

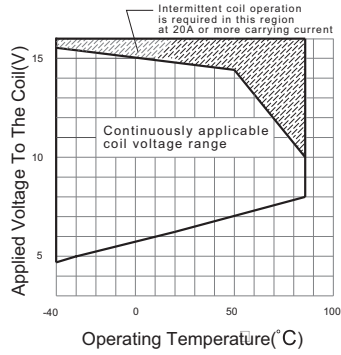


CHARACTERISTICS CURVE

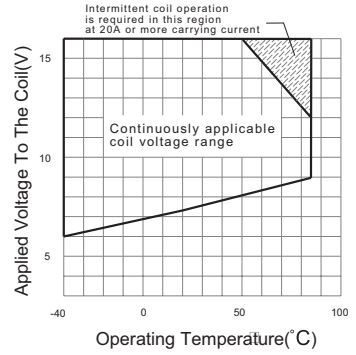
Operating Coil Voltage Range (Example)



HFKW/009

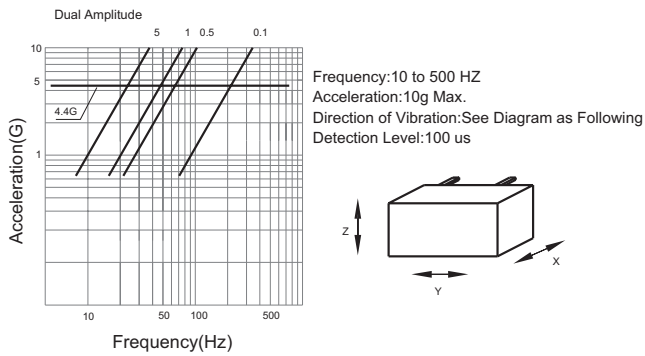


HFKW/010



HFKW/012

HFKW Vibration Resistance Characteristics



Shock Resistance Characteristics

