

HFKW

SUBMINIATURE AUTOMOTIVE RELAY



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	AgNi
Contact Rating (Res. load)	14VDC 15A	
Max. Carrying current	35A/10 min. 25A/1h	
Max. Inrush current	60A	40A
Max. switching current	NO/NC:35/10A 16VDC	
Min. Applicable load	1A 6VDC	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	500Vrms, 1min.
	Between open contacts	500Vrms, 1min.
Operate time (at nomi. Volt.)	10ms	
Release time (at nomi. Volt.)	5ms	
Temperature rise (at nomi. Volt.)	60°C max.	
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	

ORDERING INFORMATION

HFKW / 012 1Z W

Type

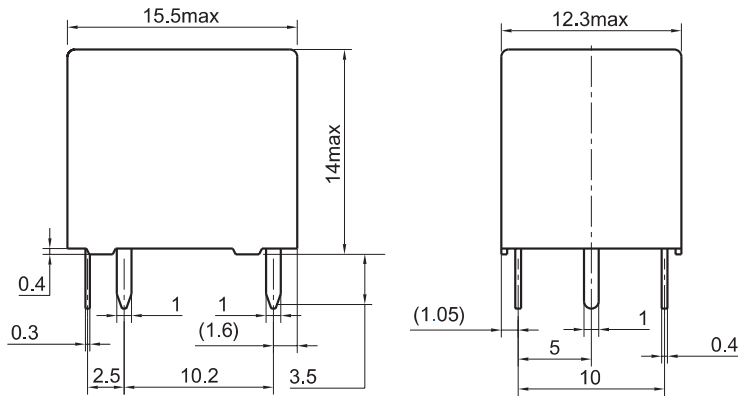
Coil voltage 6, 9, 10, 12, 18, 24VDC

Contact arrangement 1Z: 1C (SPDT)

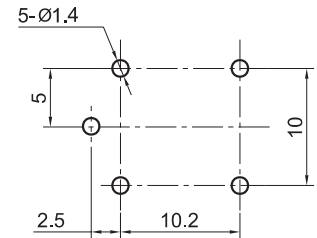
Contact Material W: AgSnO N: AgNi

OUTLINE DIMENSIONS, WIRING DIAGRAM AND PCB BOARD LAYOUT

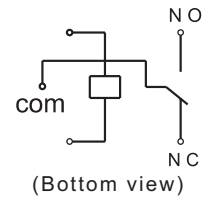
Outline Dimensions



PCB layout

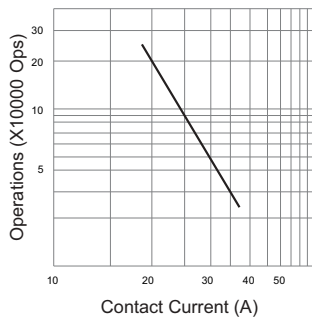


Wiring Diagram

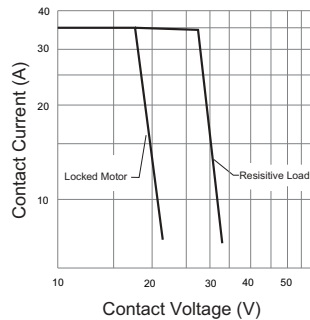


CHARACTERISTICS CURVE

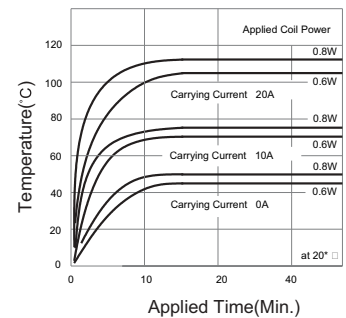
LIFE CURVE



MAXIMUM SWITCHING POWER

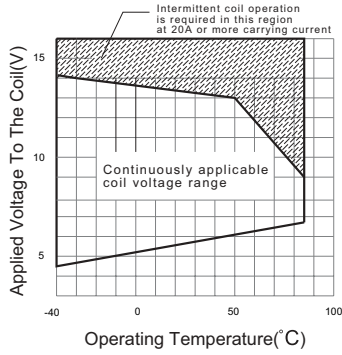


COIL TEMPERATURE RISE

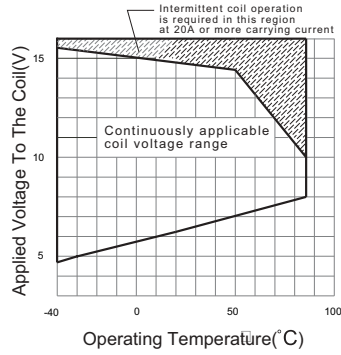


CHARACTERISTICS CURVE

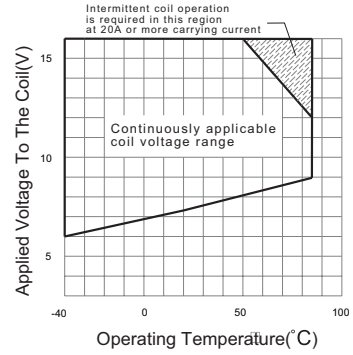
OPERATING COIL VOLTAGE RANGE(EXAMPLE)



HFKW/009

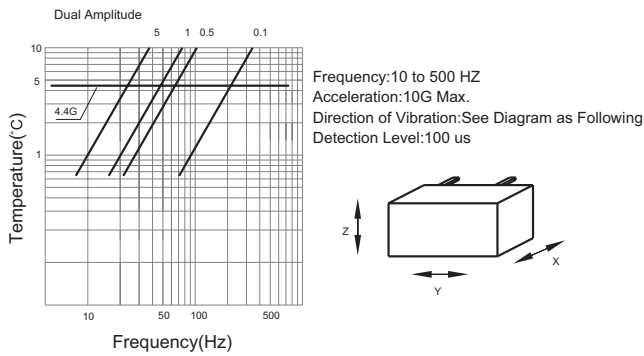


HFKW/010



HFKW/012

HFKW VIBRATION RESISTANCE CHARACTERISTICS



SHOCK RESISTANCE CHARACTERISTICS

