


Datasheet

SPDT PCB Mount Non-Latching Relay


RS Stock number [476-775](#)

HF118F 1 pole


MINIATURE HIGH POWER RELAY




File No.: E134517



File No.: 40010480



File No.: CQC04001011425



Features

- 10A switching capability
- 5kV dielectric strength (between coil and contacts)
- Low height: 12.5 mm
- Creepage distance >8mm
- Meeting VDE 0700, 0631 reinforce insulation
- Product in accordance to IEC 60335-1 available
- 1 pole configurations available
- Sockets available
- Wash tight and flux proofed types available
- Environmental friendly product (RoHS compliant)
- Outline Dimensions: (28.5 x 10.1 x 12.5) mm

CONTACT DATA

Contact arrangement	1A, 1B, 1C (specialties 1A5, 1B6)
Contact material	See ordering info.
Contact resistance	100mΩ (at 1A 6VDC)
Contact rating (Res. load)	10A 250VAC/30VDC
Max. switching voltage	440VAC / 125VDC
Max. switching current	10A
Max. switching power	2500VA / 300W
Mechanical endurance	1 x 10 ⁷ ops
Electrical endurance	1 x 10 ⁵ ops (See approval reports for more details)

CHARACTERISTICS

Insulation resistance	1000MΩ (at 500VDC)	
Dielectric strength	Between coil & contacts	5000VAC 1min
	Between open contacts	1000VAC 1min
Surge voltage (between coil & contacts)	10kV (1.2 x 50μs)	
Operate time (at nomi. vot.)	10ms max.	
Release time (at nomi. vot.)	5ms max.	
Temperature rise (at nomi. Volt.)	55K max.	
Shock resistance *	Functional	NC: 49m/s ² NO: 98m/s ²
	Destructive	980m/s ²
Vibration resistance *	NC (no coil voltage)	10Hz to 55Hz 0.8mm DA
	NO	10Hz to 55Hz 1.65mm DA
Ambient temperature	-40°C to 85°C	
Humidity	35% to 85% RH	
Termination	PCB	
Unit weight	Approx. 8g	
Construction	Wash tight, Flux proofed	

Notes: 1) The data shown above are initial values.
2) * Index is not that of relay length direction.

COIL

Coil power	220 to 290mW
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COIL DATA

at 23°C

Nominal Voltage VDC	Pick-up Voltage VDC	Drop-out Voltage VDC	Max. Allowable Voltage VDC	Coil Resistance Ω
5	3.50	0.5	11.8	113 x (1±10%)
6	4.20	0.6	14.1	164 x (1±10%)
9	6.30	0.9	21.2	360 x (1±10%)
12	8.40	1.2	28.2	620 x (1±10%)
18	12.70	1.8	42.3	1295 x (1±10%)
24	16.80	2.4	56.4	2350 x (1±15%)
48	33.60	4.8	112.8	8000 x (1±15%)
60	42.00	6.0	141.0	12500 x (1±15%)

Notes: The max. allowable voltage in the COIL DATA is coil overdrive voltage, it is the instantaneous max. voltage which the relay coil could endure in a very short time.