

Datasheet

DPDT PCB Mount Non-Latching Relay, 8 A, 48V dc

RS Stock 800-4451



Features

- Low height: 15.7 mm
- 16A switching capability
- 5kV dielectric strength (between coil and contacts)
- Creepage distance: 10mm
- Meeting VDE 0700, 0631 reinforce insulation
- Product in accordance to IEC 60335-1 available
- Sockets available
- Plastic sealed and flux proofed types available
- UL insulation system: Class F available
- Environmental friendly product (RoHS compliant)
- Outline Dimensions: (29.0 x 12.7 x 15.7) mm

CONTACT DATA

Contact arrangement	1A, 1B, 1C	2A, 2B, 2C
Contact resistance	100mΩ max.(at 1A 6VDC)	
Contact material	See ordering info.	
Contact rating (Res. load)	12A/16A 250VAC	8A 250VAC
Max. switching voltage	440VAC / 300VDC	
Max. switching current	12A / 16A	8A
Max. switching power	3000VA / 4000VA	2000VA
Mechanical endurance	1 x 10 ⁷ ops	
Electrical endurance	1 x 10 ⁵ ops (See approval reports for more details)	

COIL DATA

at 23°C

Nominal Voltage VDC	Pick-up Voltage VDC max.	Drop-out Voltage VDC min.	Max. Allowable Voltage VDC *	Coil Resistance Ω
5	3.50	0.5	7.5	62 x (1±10%)
6	4.20	0.6	9.0	90 x (1±10%)
9	6.30	0.9	13.5	202 x (1±10%)
12	8.40	1.2	18	360 x (1±10%)
18	12.60	1.8	27	810 x (1±10%)
24	16.80	2.4	36	1440 x (1±10%)
48	33.60	4.8	72	5760 x (1±15%)
60	42.00	6.0	90	7500 x (1±15%)
110	77.00	11.0	165	25200 x (1±15%)

COIL

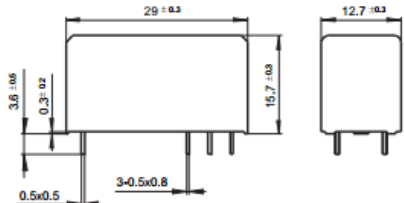
Coil power	Approx. 400mW
------------	---------------

CHARACTERISTICS

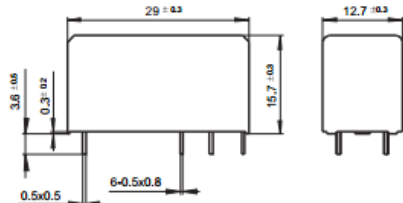
Insulation resistance	1000MΩ (at 500VDC)	
Dielectric strength	Between coil & contacts	5000VAC 1min
	Between open contacts	1000VAC 1min
	Between contact sets	2500VAC 1min
Surge voltage (between coil & contacts)	10kV (1.2 / 50μs)	
Operate time (at nomi. volt.)	15ms max.	
Release time (at nomi. volt.)	8ms max.	
Temperature rise (at nomi. volt.)	55K max.	
Shock resistance *	Functional	98m/s ²
	Destructive	980m/s ²
Vibration resistance *	10Hz to 150Hz 10g/5g	
Humidity	5% to 85% RH	
Ambient temperature	-40°C to 85°C	
Termination	PCB	
Unit weight	Approx. 13.5g	
Construction	Plastic sealed, Flux proofed	

Outline Dimensions

3.5mm Pinning (HF115F/ □□□ -□□-□-1 -□□)

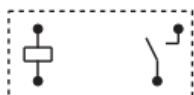


5mm Pinning (HF115F/ □□□ -□□-□-2/3/4 -□□)

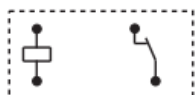


Wiring Diagram (Bottom view)

3.5/5mm Pinning, 1 Pole, 12A, HF115F/ □□□ -1 □-□-1/2-□□



1 Form A



1 Form B



1 Form C

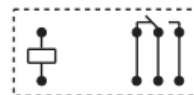
5mm Pinning, 1 Pole, 16A, HF115F/ □□□ -1 □-□-3-□□



1 Form A

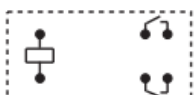


1 Form B

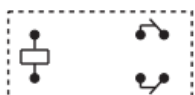


1 Form C

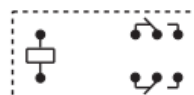
5mm Pinning, 2 Pole, 8A, HF115F/ □□□ -2 □-□-4-□□



2 Form A



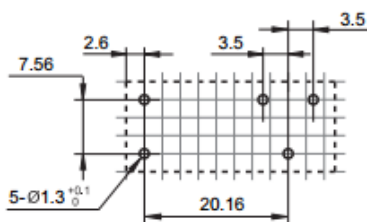
2 Form B



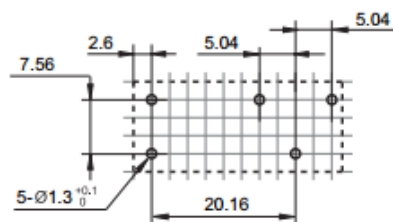
2 Form C

PCB Layout (Bottom view)

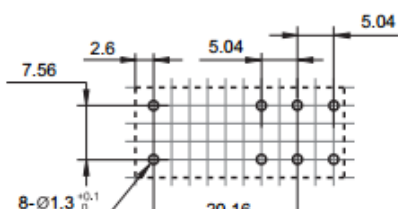
3.5mm 1Pole 12A



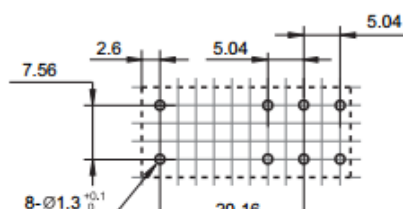
5mm 1Pole 12A



5mm 1Pole 16A

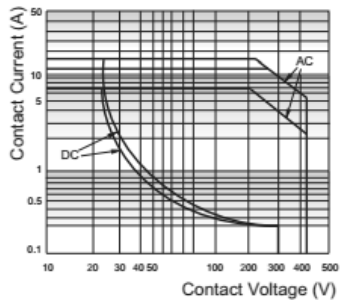


5mm 2Pole 8A

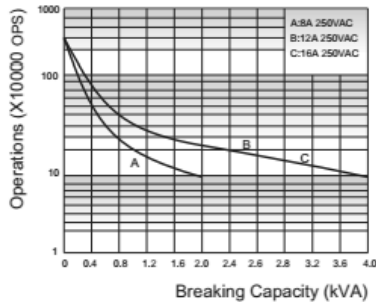


CHARACTERISTIC CURVES

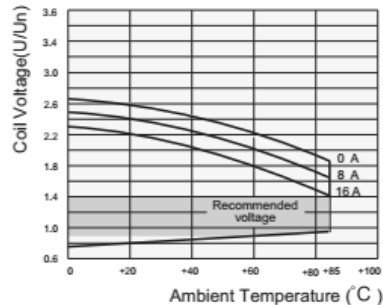
MAXIMUM SWITCHING POWER



ENDURANCE CURVE



COIL OPERATING RANGE (DC) *



Notes: * The use of a relay with an energising voltage other than the rated coil voltage may lead to reduced electrical life.
An energising voltage over the above range may damage the insulation of relay coil.