



INDUSTRIAL RELAYS

UL & CUL File #E256619

FEATURES

1. Slim size (20.3x7x15mm) at 5A switching capacity relay for high density P.C. board mounting.
2. High switching capacity.
3. High breakdown voltage: 4000V.

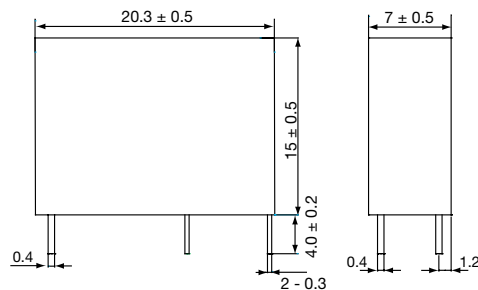
ORDERING INFORMATION

RF 1A - 12 S F
(1) (2) (3) (4) (5)

- (1) **Basic Designation**
RF = RF Series
- (2) **Contact Arrangement**
1A = 1 Form A (SPST-NO)
- (3) **Coil Voltage**
5~24V
- (4) **Enclosure**
S = Sealed Type
- (5) **Insulation System**
Nil = Standard
F = Class F

DIMENSIONS

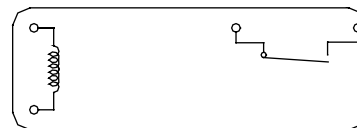
Unit: mm



Tolerance: ±0.2mm

SCHEMATICS

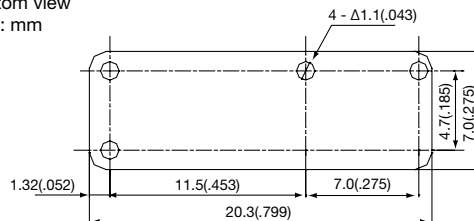
Bottom view



PCB LAYOUT

Bottom view

Unit: mm



COIL RATINGS (AT 20°C)

Coil Type	Coil Nominal Voltage (V)	Coil Resistance ($\Omega \pm 10\%$)	Pick-up Voltage (V) max.	Drop-Out Voltage (V) min.	Nominal Operating Power (W)
DC	5	125	3.75	0.25	0.2
	6	180	4.50	0.30	
	9	405	6.75	0.45	
	12	720	9.00	0.60	
	18	1620	13.5	0.90	
	24	2800	18.0	1.20	

* Max continuous Voltage at 20°C: 110% of Coil Nominal Voltage.





CONTACT RATINGS

Contact Arrangement	1A (SPST-NO)
Contact Resistance (By voltage drop 6V 1A)	50mΩ max
Resistive Load (cos Ø = 1)	5A / 125VAC 3A / 277VAC
Contact Material	silver alloy

CHARACTERISTICS

Expected Life (min. operate) Mechanical (at 180cpm) Electrical (at 20cpm)	1 x 10 ⁷ 1 x 10 ⁵
Initial Insulation Resistance	Min. 1000MΩ 500VDC
Operate Time	20ms max.
Release Time	4ms max.
Initial Breakdown Voltage	50/60Hz 4000VAC 1 min. (between coil & contacts) 50/60Hz 750VAC 1 min. (between open contacts)
Vibration Resistance	Functional: 10 to 55Hz at double Amplitude of 1.5mm Destruction: 10 to 55Hz at double Amplitude of 1.5mm
Shock Resistance	Functional: Min. 10G Destruction: Min. 100G
Ambient Temperature	-40°C ~ +85°C
Ambient Temperature (F Class)	-40°C ~ +105°C
Operating Humidity	45 to 85% RH
Unit Weight	Approx. 5g

REFERENCE DATA

