

# CIT RELAY™

# WJ105

## FEATURES:

- Switching capacity up to 10A
- Small size and light weight
- Low coil power consumption
- High contact load
- Strong resistance to shock and vibration



18.2 x 10.6 x 14.7 mm

## CONTACT DATA

Contact Arrangement	1A = SPST N.O 1C = SPDT
Contact Rating	5A @ 250VAC 10A @ 125VAC Resistive ¼ hp, 250VAC TV-5, 120VAC
Contact Resistance	< 50 milliohms initial
Contact Material	AgCdO
Maximum Switching Power	150W 1250VA
Maximum Switching Voltage	277VAC, 30VDC
Maximum Switching Current	10A

## COIL DATA

Coil Voltage VDC		Coil Resistance $\Omega \pm 10\%$		Pick Up Voltage VDC (max)	Release Voltage VDC (min)	Coil Power W	Operate Time ms	Release Time ms
Rated	Max.	.20W	.45W	75% of rated voltage	10% of rated voltage			
3	3.9	45	20	2.25	0.3	.20 .45	10	10
5	6.5	125	55	3.75	0.5			
6	7.8	180	80	4.50	0.6			
9	11.7	400	180	6.75	0.9			
12	15.6	720	320	9.00	1.2			
24	31.2	2800	1280	18.00	2.4			
48	62.4	11520	5120	36.00	4.8			

## CAUTION:

1. The use of any coil voltage less than the rated coil voltage may compromise the operation of the relay.
2. Pickup and release voltages are for test purposes only and are not to be used as design criteria.

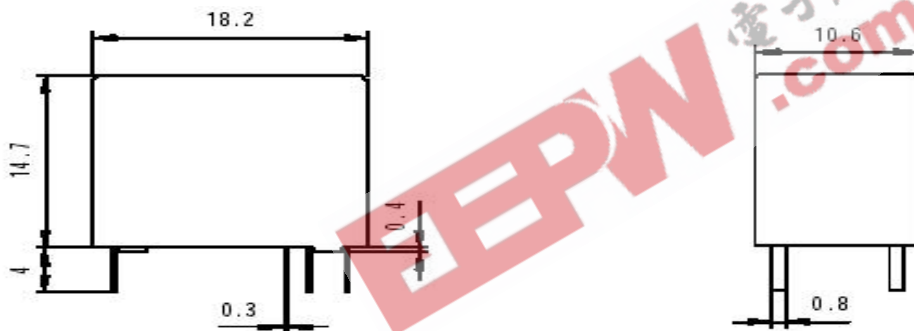
## GENERAL DATA

Electrical Life @ rated load	100K cycles, typical
Mechanical Life	10M cycles, typical
Insulation Resistance	100M $\Omega$ min @ 500VDC
Dielectric Strength, Coil to Contact	300V rms min. @ sea level
Contact to Contact	750V rms min. @ sea level
Shock Resistance	100m/s <sup>2</sup> for 11ms
Vibration Resistance	1.50mm double amplitude 10-40Hz
Terminal (Copper Alloy) Strength	10N
Operating Temperature	-40 °C to + 85 °C
Storage Temperature	-40 °C to + 155 °C
Solderability	230 °C $\pm$ 2 °C for 10 $\pm$ 0.5s
Weight	9.5g

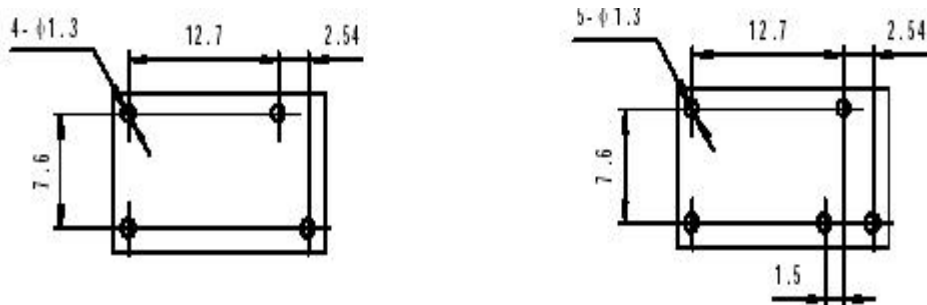
## ORDERING INFORMATION

<b>1. Series:</b>	WJ105	1C	S	10	12VDC	.45
WJ105						
<b>2. Contact Arrangement:</b>	1A = SPST N.O. 1C = SPDT (.45W coil only)					
<b>3. Sealing Options:</b>	S = Sealed C = Dust Cover					
<b>4. Current Rating:</b>	10 = 10A					
<b>5. Coil Voltage:</b>	3VDC 5VDC 6VDC 9VDC 12VDC 24VDC 48VDC					
<b>6. Coil Power:</b>	.20 = .20W .45 = .45W					

## DIMENSIONS (Unit = mm)

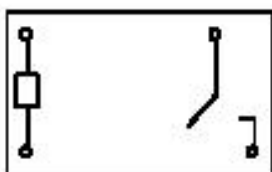


## PCB Layout



## Schematics

1A (SPST-NO)



1C (SPDT)

