



 RoHS Compliant

CIT RELAY & SWITCH™
Division of Circuit Interruption Technology, Inc.

J105D

E197851

20.59 x 10.15 x 15.75 mm

Features

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

Contact Data*

Contact Arrangement	1A = SPST N.O. 1C = SPDT
Contact Rating N.O.	10A @ 120VAC, Resistive, 10K cycles, 85°C ambient 10A @ 277VAC, Resistive, 10K cycles, 40°C ambient 5A @ 240VAC, Resistive, 10K cycles, 85°C ambient 3A @ 30VDC, Resistive, 10K cycles, 85°C ambient TV-5 @ 120VAC, 25K cycles, 40°C ambient 1/4 hp @ 120/240/277VAC, 6K cycles, 40°C ambient
N.C.	10A @ 120VAC, Resistive, 10K cycles, 85°C ambient 5A @ 240VAC, Resistive, 10K cycles, 85°C ambient 3A @ 30VDC, Resistive, 6K cycles, 40°C ambient 1/4 hp @ 120/240/277VAC, 6K cycles, 40°C ambient

Contact Resistance	< 50 milliohms initial
Contact Material	AgSnO ₂
Maximum Switching Power	2770VA
Maximum Switching Voltage	277VAC
Maximum Switching Current	10A

Coil Data*

Coil Voltage VDC		Coil Resistance Ω +/- 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 or .45	10	10
5	6.5	125	55	3.75	0.5			
6	7.8	180	80	4.50	0.6			
9	11.7	405	180	6.75	0.9			
12	15.6	720	320	9.00	1.2			
18	22.8	1620	720	13.50	1.8			
24	31.2	2880	1280	18.00	2.4			
48	62.4	n/a	5120	36.00	4.8			

J105D

General Data*

Electrical Life @ rated load	100K cycles, average
Mechanical Life	10M cycles, average
Insulation Resistance	1000M Ω min. @ 500VDC, initial
Dielectric Strength	4000V rms min. @ sea level, initial
Coil to Contact	
Contact to Contact	1000V rms min. @ sea level, initial
Shock Resistance	100m/s ² for 11 ms
Vibration Resistance	1.50mm double amplitude 10~55Hz
Operating Temperature	-55°C to +125°C
Storage Temperature	-55°C to +125°C
Solderability	260°C for 5 s
Weight	7g

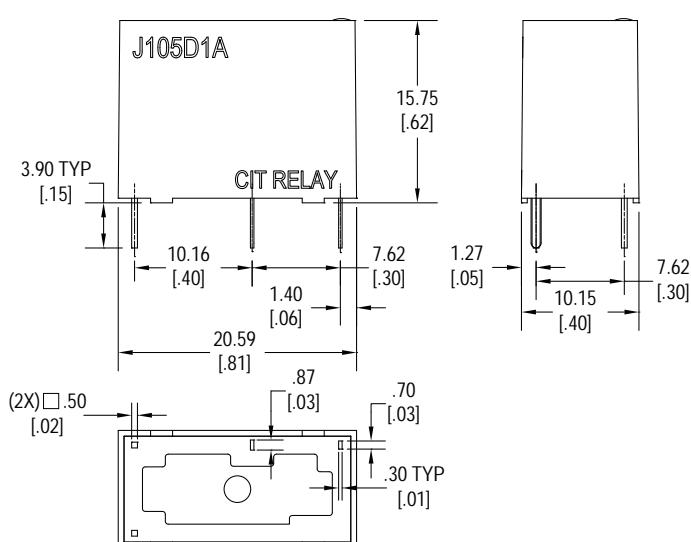
* Values can change due to the switching frequency, desired reliability levels, environmental conditions and in-rush load levels. It is recommended to test actual load conditions for the application. It is the user's responsibility to determine the performance suitability for their specific application. The use of any coil voltage less than the rated coil voltage may compromise the operation of the relay.

Ordering Information

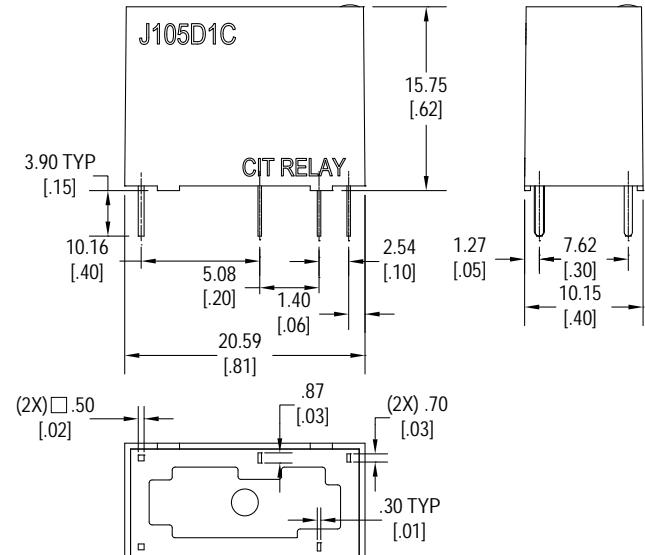
1. Series	J105D	1A	S	12VDC	.45
J105D					
2. Contact Arrangement					
1A = SPST N.O.					
1C = SPDT **only available with .45W coil power					
3. Sealing Option					
S = Sealed, Standard					
4. Coil Voltage					
3VDC					
5VDC					
6VDC					
9VDC					
12VDC					
18VDC					
24VDC					
48VDC **only available with .45W coil power					
5. Coil Power					
.20 = .20W					
.45 = .45W					

Dimensions

Units = mm



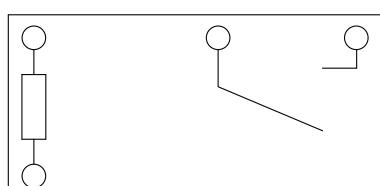
1A



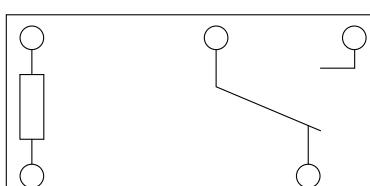
1C

Schematics & PC Layouts

Bottom Views



1A



1C

