

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

RoHS Compliant

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
		¼ 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
		¼ 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) 75% of rated voltage	Release Voltage VDC (min) 10% of rated voltage	Coil Power W	Operate Time ms	Release Time ms
Rated	Max	.20W	.45W					
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			

Dimensions shown in mm. Dimensions are shown for reference purposes only.

Specifications and availability subject to change without notice.

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General Data*

Electrical Life @ rated load		100K cycles, average
Mechanical Life		10M cycles, average
Insulation Resistance		1000M Ω min. @ 500VDC, initial
Dielectric Strength	Coil to Contact	4000V rms min. @ sea level, initial
	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

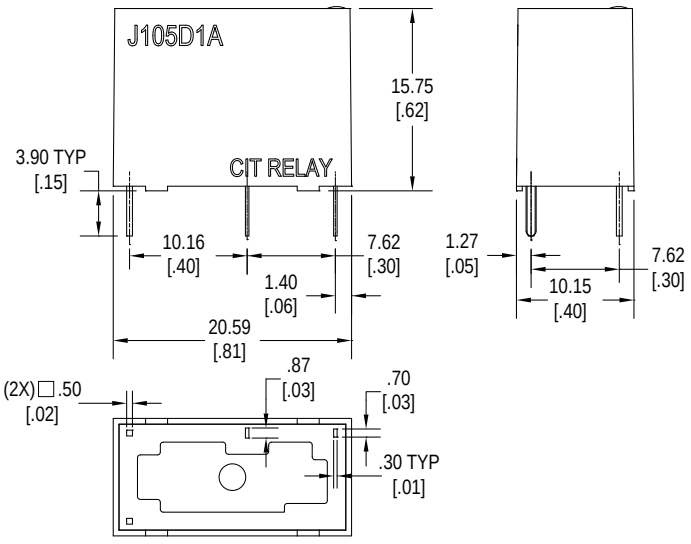
1. Series	J105D	1A	S	12VDC	.45
J105D					
2. Contact Arrangement 1A = SPST N.O. 1C = SPDT **only available with .45W coil power					
3. Sealing Option S = Sealed, Standard					
4. Coil Voltage 3VDC 5VDC 6VDC 9VDC 12VDC 18VDC 24VDC 48VDC **only available with .45W coil power					
5. Coil Power .20 = .20W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

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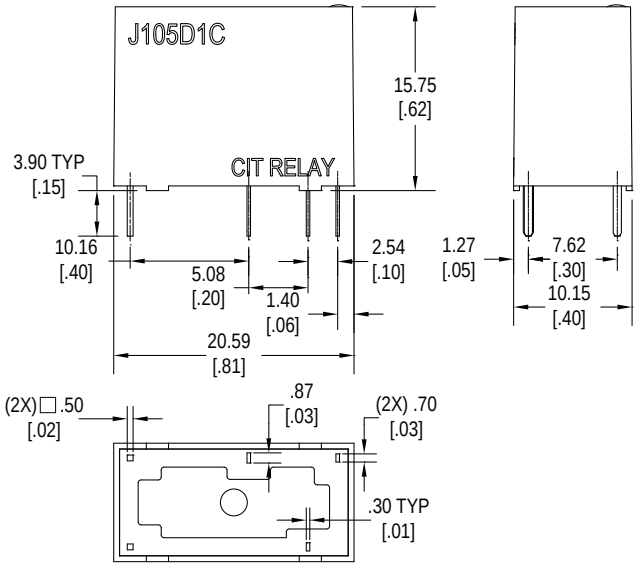
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Dimensions

Units = mm



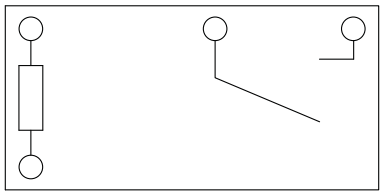
1A



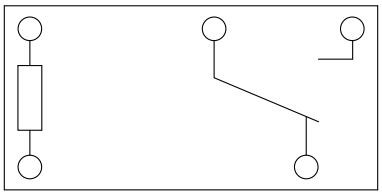
1C

Schematics & PC Layouts

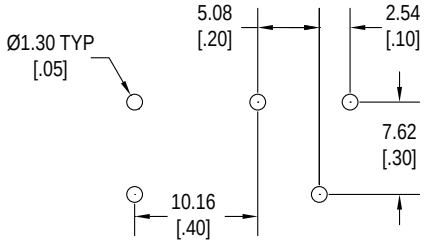
Bottom Views



1A



1C



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