Features

 Miniature size 18.2 x 10.2 x 14.7h. • 1 Form A (SPST-NO) contact arrangement.

· Sensitive and standard coils available. · Immersion cleanable, sealed version available.

Arrangements: 1 Form A (SPST-NO).

Minimum Load: 100mA @5VDC

Max. Switching Rate: 300 ops./min. (no load).

Contact Data @ 20°C

Material: Ag, Ag Alloy

Contact Ratings



Designed to meet UL, CSA, VDE, TUV requirements.
Designed to meet 4kV dielectric between coil and contacts (OJ).

30 ops./min. (rated load)

OJ/OJE series

3-10 Amp Miniature, PC Board Relay

Appliances, HVAC, Industrial Control.

Η1	UL File No. E82292
SP	CSA File No. LR48471
	VDE File No. 10080
4	TUV File No. R75081

Users should thoroughly review the technical data before selecting a product part number. It is recommended that user also seek out the pertinent approvals files of the agencies/laboratories and review them to ensure the product meets the requirements for a given application.

Coil Data @ 20°C

OJ/OJE-L Sensitive						
Rated Coil Voltage (VDC)	Nominal Current (mA)	Coil Resistance (ohms) ± 10%	Must Operate Voltage (VDC)	Must Release Voltage (VDC)		
5	40.0	125	3.75	0.25		
6	33.3	180	4.50	0.30		
9	22.5	400	6.75	0.45		
12	16.7	720	9.00	0.60		
24	8.6	2,800	18.00	1.20		

OJ/OJE-D and -H Standard					
Rated Coil Voltage (VDC)	ge Current Resistance Voltage		ge Current Resistance		Must Release Voltage (VDC)
5	91.0	55	3.50	0.25	
6	75.0	80	4.20	0.30	
9	50.0	180	6.30	0.45	
12	37.5	320	8.40	0.60	
24	18.8	1,280	16.80	1.20	
48	9.4	5,100	33.60	2.40	

Operate Data

Must Operate Voltage:

OJ/OJE -L: 75% of nominal voltage or less. OJ/OJE -D and -H: 70% of nominal voltage or less.

Must Release Voltage:

OJ/OJE -L: 5% of nominal voltage or more. OJ/OJE -D and -H: 5% of nominal voltage or more.

Operate Time: OJ/OJE -L: 15 ms max.

OJ/OJE -D and -H: 10 ms max.

Release Time: 4 ms max.

Environmental Data

Temperature Range: Operating: OJ/OJE-L: -30°C to +80°C OJ/OJE-D and -H: -30°C to +60°C. Vibration, Mechanical: 10 to 55 Hz., 1.5mm double amplitude Operational: 10 to 55 Hz., 1.5mm double amplitude. Shock, Mechanical: 1,000m/s² (100G approximately). Operational: 100m/s² (10G approximately). Operating Humidity: 20 to 85% RH. (Non-condensing)

Mechanical Data

Termination: Printed circuit terminals. Enclosure (94V-0 Flammability Ratings): OJ/OJE-SS: Vented (Flux-tight), plastic cover. OJ/OJE-SH: Sealed, plastic case. Weight: 0.32 oz (9g) approximately.

Specifications and availability

subject to change

Dimensions are shown for 422 reference purposes only.

Dimensions are in inches over (millimeters) unless otherwise specified

Expected Mechanical Life: 10 million operations (no load). Expected Electrical Life: 100,000 operations (rated load). Initial Contact Resistance: 100 milliohms @ 1A,6VDC.

	•	
Ratings:	OJ/OJE-LM:	3A @ 250VAC resistive,
		3A @ 28VDC resistive.
	OJ/OJE-LMH:	8A @ 250VAC resistive,
		8A @ 28VDC resistive.
	OJ/OJE-DM:	5A @ 250VAC resistive,
		5A @ 28VDC resistive.
	OJ/OJE-HM:	10A @ 250VAC resistive,
		10A @ 28VDC resistive.
Max. Sw	itched Voltage	: AC: 265V.
		DC: 30V.
Max. Sw	itched Power:	
	OJ/OJE-LM:	720VA, 90W
	OJ/OJE-LMH:	1,800VA, 200W
	OJ/OJE-DM:	1,200VA, 150W
	OJ/OJE-HM:	2,500VA, 280W

Note: Consult factory regarding TV-5 rated models.

Initial Dielectric Strength

Between Open Contacts: OJ: 750VAC 50/60 Hz. (1 minute). OJE: 750VAC 50/60 Hz. (1 minute). Between Coil and Contacts: OJ: 4,000VAC 50/60 Hz. (1 minute). OJE: 3,000VAC 50/60 Hz. (1 minute).

Surge Voltage Between Coil and Contacts: OJ: 10,000V (1.2/50µs).

OJE: 5,000V (1.2/50µs)

Initial Insulation Resistance

Between Mutually Insulated Elements: 1,000M ohms min. @ 500VDCM.

Coil Data

Voltage: 5 to 48VDC. Nominal Power: OJ/OJE-LM and LMH: 200 mW. OJ/OJE-DMand HM: 450 mW Coil Temperature Rise:

OJ/OJE-LM and LMH : 30°C max., at rated coil voltage. OJ/OJE-DM and HM: 40°C max., at rated coil voltage. Max. Coil Power: 130% of nominal. Duty Cycle: Continuous.

Ordering Information									
Тур	ical Part Number 🕨	OJE	-SH	-1	12	L	M	Н	,095
1. Basic Series: OJ = 4kV dielectric, coil and contacts. OJE = 3kV dielectric, coil and contacts.									
2. Enclosure: SS = Vented (Flux-tight)*, plastic cover. SH = Sealed, plastic case.			_						
3. Termination: 1 = 1 pole									
4. Coil Voltage: 05 = 5VDC 09 = 9VDC 24 = 24V 06 = 6VDC 12 = 12VDC 48 = 48V					-				
5. Coil Input/Contact Rating: L = Sensitive (200mW) Coil, 3A Contacts** E H = Standard (450mW) Coil, 10A Contacts) = Standard (450mW) Coi	I, 5A Contact	ts						
6. Contact Arrangement: M = 1 Form A, SPST-NO							-		
7. High Capacity Contact Rating Option for Sen H = 8A Contacts (Only available with Coil Input/								_	
8. Suffix: ,000 = Standard model for enclosure code "SS"	,095 = Standard model 1	for enclosure	code "SH		Other S	uffix = Cı	ustom ma	odel	-

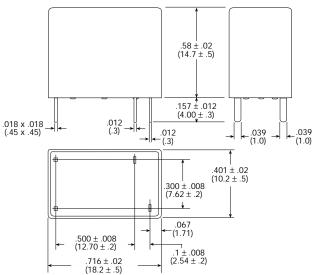
* Not suitable for immersion cleaning processes.

** For higher contact rating with sensitve coil, add suffix "H" to the end of the part number as indicated in step 7 of Ordering Information.

Our authorized distributors are more likely to stock the following items for immediate delivery.

OJ-SH-105HM,095	OJE-SH-105DM,095	OJE-SH-112HM,095	OJE-SH-124LMH,095
OJ-SH-112LMH,095	OJE-SH-112DM,095	OJE-SH-105LMH,095	
OJ-SH-124LMH,095	OJE-SH-124DM,095	OJE-SH-112LMH,095	

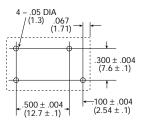
Outline Dimensions



Wiring Diagram (Bottom View)

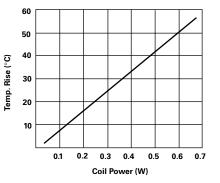


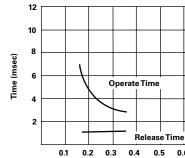
PC Board Layout (Bottom View)



Reference Data

Coil Temperature Rise

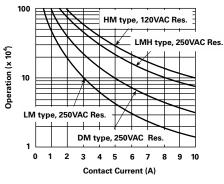




Coil Power (W) Test relay: OJE-SH-112LMH

Operate Time

Life Expectancy



Dimensions are shown for reference purposes only.

Dimensions are in inches over (millimeters) unless otherwise specified.

Specifications and availability subject to change.

0.6

0.7