

Miniature General Purpose Relays

**7
RELAYS**



VE RELAY



CONTACT DATA

Arrangement—1 Form A (SPST-NO)
or 1 Form C (SPDT)

Material & Rating

Type	Material	Contact Rating*	
		N.O.	N.C.
VE-()H	Gold overlay silver-nickel alloy	5A	3A
VE-()HE	Silver-nickel alloy	5A	3A
VE-()HS	Silver-cadmium oxide alloy	5A	5A

*250 VAC resistive

Resistance (Initial)— 70 mΩ VVE-() H
100 mΩ (6VDC.1A) VVE-() HE
200 mΩ (6VDC.1A) VVE-() HS

Life Expectancy—Mechanical: 10 million operations
Electrical: 100,000 operations

COIL DATA

Voltage—5 to 48 VDC

Power (at 20°C)—

	Standard	High Sensitive
Nominal Operate	0.36 W 0.18 W	0.25 W 0.13 W

Operate (at 20°C)—70% of nominal voltage

GENERAL DATA

Insulation Resistance—1000 MΩ min, at 500 VDC

Dielectric Strength—750 VAC (50/60 Hz) between open contact (N.C.),
1000 VAC (50/60 Hz) between open contact (N.O),
2000 VAC (50/60 Hz) between all other conductor

Surge Strength—4000 V or 6000 V

Temperature Range—Standard type -40°C ~ +85°C } Non-carring
High sensitive type -40°C ~ +90°C } condition of contacts

Time Value (at nominal voltage)—Operate Max. 10 ms
Release Max. 5 ms

Weight—Approx. 8 gr

Vibration Resistance*—10 ~ 55 Hz (Double amplitude of 3.3mm)
.....Destructive, Unerring

Shock Resistance*—50 G (11 ± 1 ms) Destructive
(*Reference Value) 10 G (11 ± 1 ms)..... Unerring

Enclosure—PBT

Ordering Code	Nominal Voltage V DC	Coil Resistance Ω ± 10%	Must Operate Voltage VDC
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Standard types

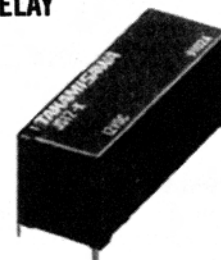
	5	69	Nominal Voltage × 70%
	6	100	
	9	225	
VE-() H E-K	12	400	
VE-() H S-K	14	544	
	18	900	
	24	1600	
	48	6400	

High Sensitive types

	5	100	Nominal Voltage × 70%
	6	145	
	9	325	
VE-() H SE-K	12	575	
VE-() H SS-K	14	790	
	18	1300	
	24	2310	
	48	9220	



JS RELAY



L—1.142"
W—0.394"
H—0.492"

CONTACT DATA

Arrangement—1 form A or 1 form C

Material—Gold plate silver alloy

Resistance—Max. 30 mΩ (at 1A 6 VDC)

Rating—8A 250 VAC/24 VDC (Resistive)

Max. Switching Power—2,000 VA/192 W

Max. Switching Voltage—250 VAC/150 VDC

Max. Switching Current—8A

Max. Carrying Current—10A

Life Expectancy—Mechanical: 5 x 10⁶
Electrical: 1 x 10⁵ (Rated load)

COIL DATA

Nominal Voltage—5 ~ 60 VDC

Power (at 20°C)—Nominal: 220 ~ 280 mW

Operate: 110 ~ 140 mW

Operate & Release Voltage (at 20°C)—See back side

Max. Continuous Voltage (at 20°C)—Nominal Voltage x 225%

GENERAL DATA

Insulation Resistance—1.000 MΩ (at 500 VDC)

Dielectric Strength—1000 VAC (open contacts)
5000 VAC (coil and contacts)

Surge Strength—10kV (at 1.2 x 50μs Surge wave)

Temperature Range—-40°C ~ +85°C

Time Value (at Nominal Voltage)—Operate: Max. 10 ms
Release: Max. 5ms

Vibration Resistance—

Misoperation: 10 ~ 55 Hz at double amplitude 1.65 mm

Endurance: 10 ~ 55 Hz at double amplitude 3.3 mm

Shock Resistance—Misoperation: 100 m/s² (11=1ms)
Endurance: 1000 m/s² (6=1ms)

Weight—Approx. 5g

Enclosure—PBT

Ordering Code	Nominal Coil Voltage (VDC)	Coil Resistance (Ω ± 10% at 20°C)	Must Operate Voltage 20°C (VDC)	Must Release Voltage (VDC at 20°C)
JS - 5 E - K	5	112	3.5	0.5
JS - 6 E - K	6	160	4.2	0.6
JS - 12 E - K	12	660	8.5	1.2
JS - 18 E - K	18	1,455	12.7	1.8
JS - 24 E - K	24	2,350	16.8	2.4
JS - 48 E - K	48	8,000	33.4	4.8