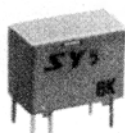


**Sub Miniature Printed Circuit Board Relays**



**SY RELAYS**

1 Amp SPDT  
L — 0.492",  
W — 0.291",  
H — 0.374"



**CONTACT DATA**

Arrangement — 1 Form C  
Material — Gold overlay silver-palladium  
Resistance — Max. 100 mΩ (initial value)  
Ratings — 0.5A, 120V AC or 1A, 24V DC (resistive) switched  
2.0A carrying current  
Life Expectancy — Mechanical: Min. 5 million operations  
Electrical: SY Min. 150,000 operations at rated load

**COIL DATA**

Voltages — 1.5 to 24V DC  
Power (at 20°C) —  
Operate — 0.075 watt  
Nominal — 0.15 watt  
Operate (at 20°C) — 70% of nominal voltage  
Duty — Continuous

**GENERAL DATA**

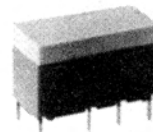
Insulation Resistance — 100 MΩ minimum at 500V DC  
Dielectric Strength — 500V AC (50, 60 Hz), between open contacts  
1000V AC between contacts and coil  
Temperature Range — -40°C to +90°C  
Time Values (approx.) — Operate 1.5 ms, Release 1 ms (at nominal voltage)  
Vibration Resistance — 20G (10 ~ 300 Hz) amplitude 3 mm  
Shock Resistance — 50G  
Mounting — For direct printed circuit mounting on grid spacing  
of 2.54 mm (0.1 in.)  
Approximate Weight — 1.7 gr (0.06 oz.)  
Enclosure — Polybutylene terephthalate (PBT)

Nominal Coil Voltage	Coil Resistance	Operate Voltage	Type No.
1.5	15	1.05	SY-15-K
3	60	2.1	SY-3-K
5	167	3.5	SY-5-K
6	240	4.2	SY-6-K
9	540	6.3	SY-9-K
12	960	8.4	SY-12-K
24	3290	16.8	SY-24-K



**RY RELAY**

1 Amp DPDT  
L — 0.795",  
W — 0.386",  
H — 0.472"



**CONTACT DATA**

Arrangement — 2 Form C, 2 Form D  
Material — Gold overlay silver-palladium  
Resistance — Max. 100 mΩ (initial)  
Ratings — 0.5A 120V AC or 1A 24V DC (resistive)  
Life Expectancy — Mechanical: Min. 20 million operations  
Electrical: Min. 500,000 operations at 1A 24V DC  
Min. 200,000 operations at 0.5A 120V AC

**COIL DATA**

Voltages — 4.5 to 48V DC  
Power (at 20°C) —  
Operate — 0.075 watt (0.098 watt for 18V, 24V coil, 0.138 watt for 48V coil)  
Nominal — 0.15 watt (0.2 watt for 18V, 24V coil, 0.3 watt for 48V coil)  
Operate (at 20°C) — 68 ~ 71% of nominal voltage  
Duty — Continuous

**GENERAL DATA**

Insulation Resistance — 1000 MΩ min. at 500V DC  
Dielectric Strength — 500V AC between open contact  
1000V AC between all other conductors  
Temperature Range — -40°C ~ +85°C at nominal voltage  
Surge Strength — 1500V between all conductors  
Time Values (max.) — Operate 6 ms, Release 3 ms at nominal voltage  
Vibration Resistance — 10G (10 ~ 55 Hz)  
Shock Resistance — 10G (11 ±1 ms) — Unerror, 100G (6 ±1 ms) — Destruction  
Enclosure — Polybutylene terephthalate (PBT)

**Standard Coil and Contact Combination (20°C)**

Nominal Voltage	Operate Voltage	Maximum Continuous Voltage	Coil Resistance ±10%, Ohms	Ordering Code
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**B-M (2 form C) Sensitive Type**

5	3.6	12.5	167	RY-5W-K
6	4.3	15.0	240	RY-6W-K
9	6.4	22.5	540	RY-9W-K
12	8.5	30.0	960	RY-12W-K
24	16.8	51.6	2880	RY-24W-K
48	32.6	84.0	7680	RY-48W-K

**M-B (2 form D)**

5	3.3	7.1	55	RY-5D-K
6	4.0	8.5	80	RY-6D-K
9	5.9	12.8	180	RY-9D-K
12	7.9	17.0	320	RY-12D-K
24	15.8	34.1	1280	RY-24D-K
48	31.8	65.8	4800	RY-48D-K

**B-M (2 form C) Standard Type**

5	2.5	7.0	45	RY-5WZ-K
6	3.0	8.4	66	RY-6WZ-K
9	4.5	12.6	140	RY-9WZ-K
12	6.0	16.8	280	RY-12WZ-K
24	12.0	33.6	1070	RY-24WZ-K
48	24.0	67.2	4000	RY-48WZ-K

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RELAYS**