

## ■ SPECIFICATIONS

Item			NY
Contact	Arrangement		1 form A (SPST-NO)
	Material		Gold overlay silver alloy
	Style		Bifurcated
	Resistance (initial)		Maximum 30 mΩ (at 1 A 6 VDC)
	Rating (resistive)		3 A 250 VAC or 3 A 30 VDC
	Maximum Carrying Current		5 A
	Maximum Switching Power		750 VA, 90 W
	Maximum Switching Voltage		270 VAC, 125 VDC
	Maximum Switching Current		5 A
	Minimum Switching Load* <sup>1</sup>		1mA 5 VDC
Coil	Nominal Power (at 20°C)		0.12W
	Operate Power (at 20°C)		0.054 W
	Operating Temperature		-40°C to +90°C (no frost) (refer to the CHARACTERISTIC DATA)
Time Value	Operate (at nominal voltage)		Maximum 10 ms
	Release (at nominal voltage)		Maximum 5 ms
Insulation	Resistance (at 500 VDC)		Minimum 1,000 MΩ
	Dielectric Strength	between open contacts	750 VAC 1 minute
		between coil and contacts	3,000 VAC 1 minute
	Surge Strength		5,080 V (at 1.2 × 50 μs)
Life	Mechanical		2 × 10 <sup>7</sup> operations minimum
	Electrical		1 × 10 <sup>5</sup> operations minimum (at 3A 250VAC, 30VDC) 1.5 × 10 <sup>5</sup> operations minimum (at 3 A 120 VAC) 5 × 10 <sup>4</sup> operations minimum (at 5 A 250 VAC)
Other	Vibration Resistance	Misoperation	10 to 55 Hz (double amplitude of 1.5 mm)
		Endurance	10 to 55 Hz (double amplitude of 5.0 mm)
	Shock Resistance	Misoperation	100 m/s <sup>2</sup> (11 ± 1 ms)
		Endurance	1,000 m/s <sup>2</sup> (6 ± 1 ms)
	Weight		Approximately 3.5 g

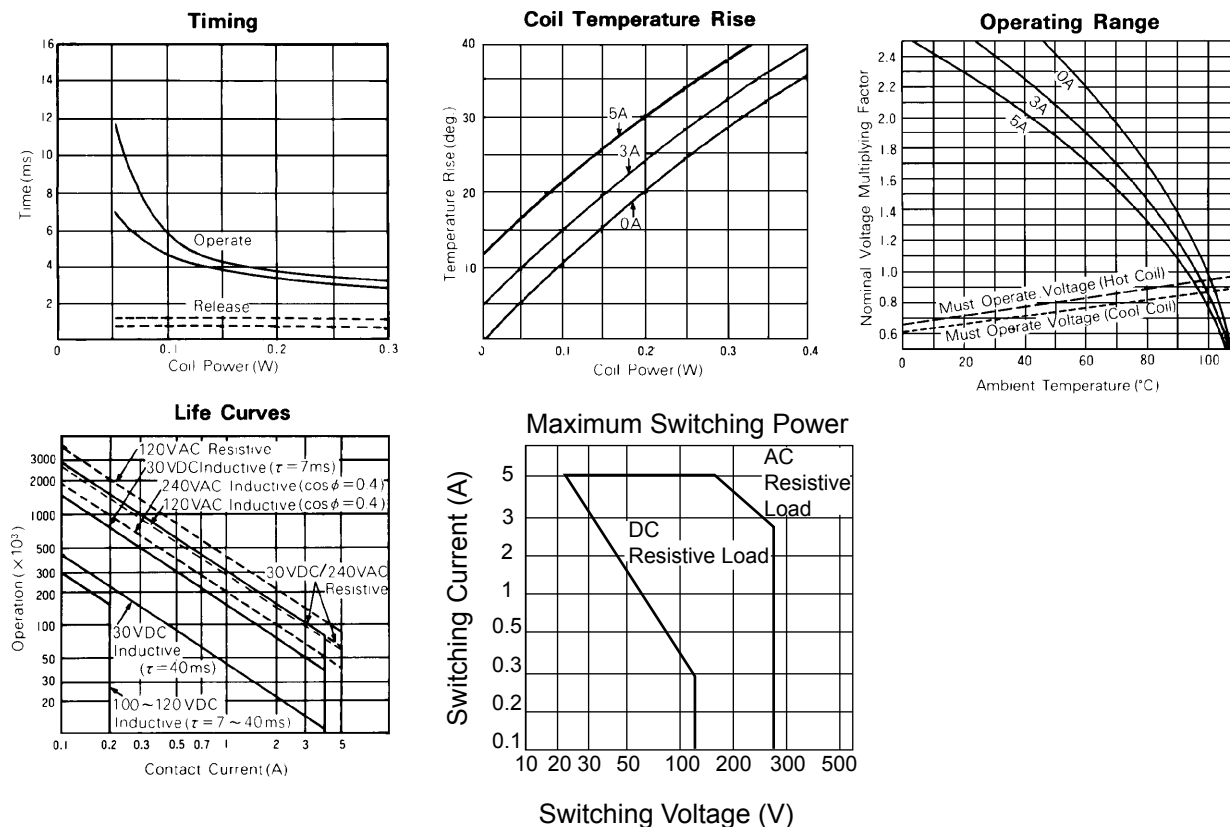
\*<sup>1</sup> Minimum switching loads mentioned above are reference values. Please perform the confirmation test with the actual load before production since reference values may vary according to switching frequencies, environmental conditions and expected reliability levels.

## COIL DATA CHART

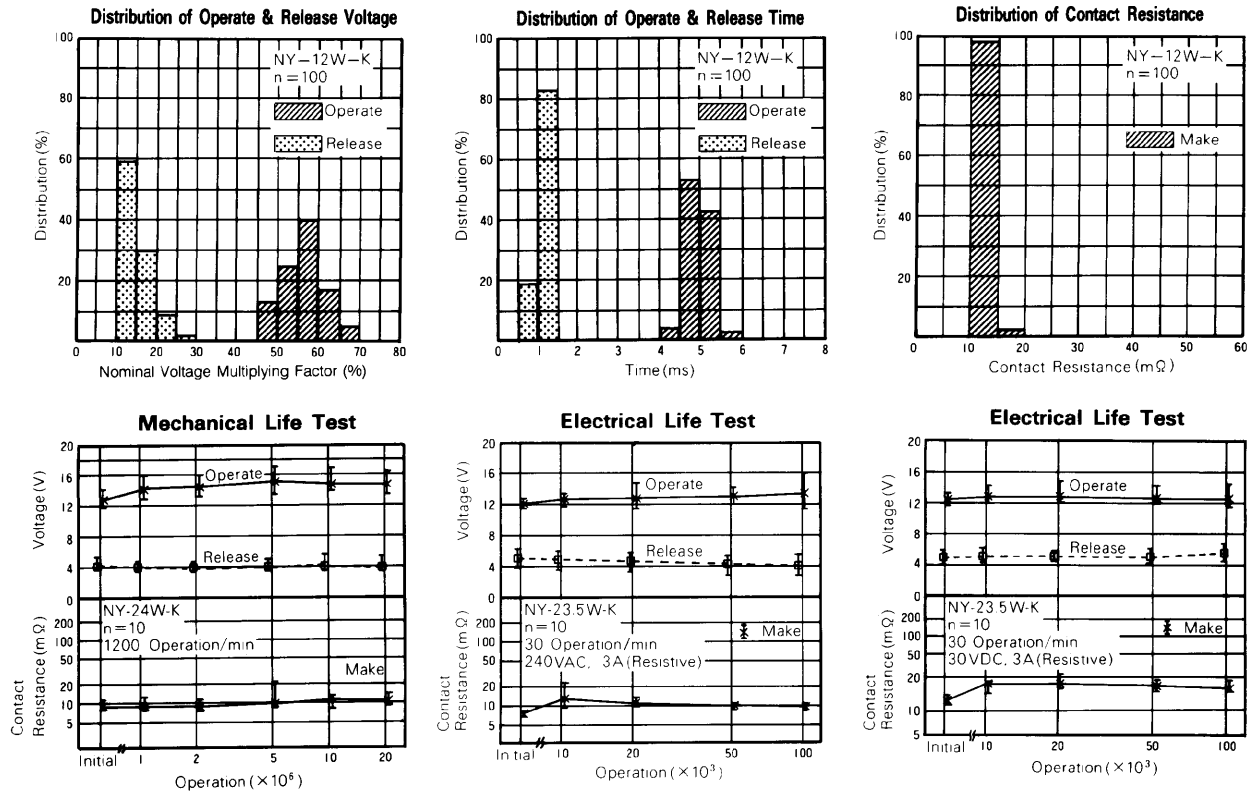
MODEL	Nominal voltage	Coil resistance ( $\pm 10\%$ )	Must operate voltage	Must release voltage	Nominal power
NY- 4.5 W-K	4.5 VDC	169 $\Omega$	3 VDC	0.45 VDC	120 mW
NY- 5 W-K	5 VDC	208 $\Omega$	3.35 VDC	0.5 VDC	120 mW
NY- 6 W-K	6 VDC	300 $\Omega$	4 VDC	0.6 VDC	120 mW
NY- 9 W-K	9 VDC	675 $\Omega$	6 VDC	0.9 VDC	120 mW
NY- 12 W-K	12 VDC	1,200 $\Omega$	8 VDC	1.2 VDC	120 mW
NY- 18W-K	18 VDC	2,700 $\Omega$	12.1VDC	1.8 VDC	120 mW
NY- 24 W-K	24 VDC	4,800 $\Omega$	16.1 VDC	2.4 VDC	120 mW

Note: All values in the table are measured at 20°C

## CHARACTERISTIC DATA



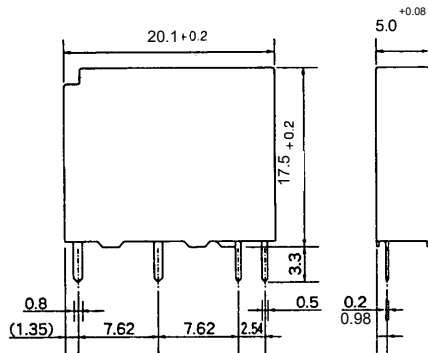
## REFERENCE DATA



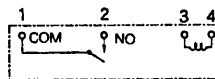
## DIMENSIONS

### Dimensions

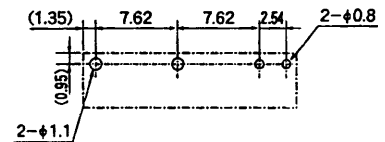
NY type



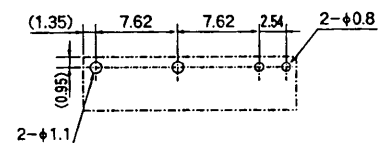
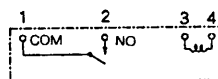
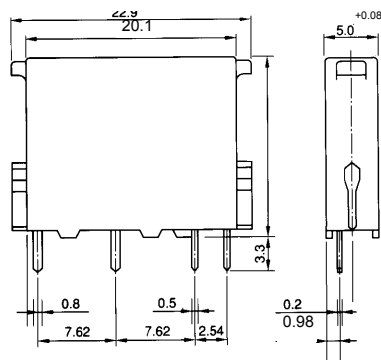
### Schematics (BOTTOM VIEW)



### PC board mounting hole layout (BOTTOM VIEW)

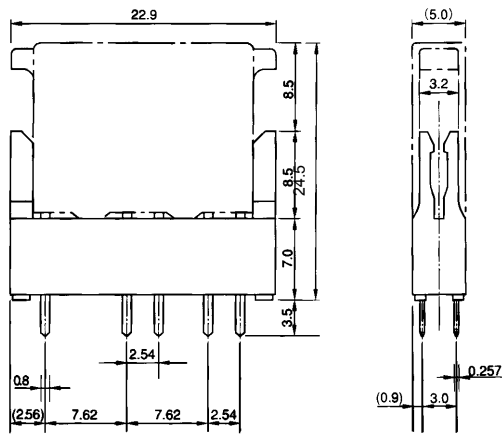


NYP type

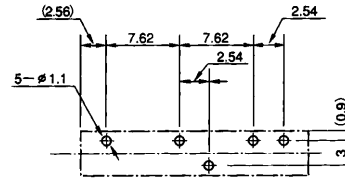


Unit: mm

## ■ SOCKET DIMENSIONS



## ■ SOCKET DRILLING PLANT



Unit: mm

## ■ NOTES

1. Socket ordering code. JL-5N
2. Standard IC socket is not recommended.  
Please use socket JL-5N.

## RoHS Compliance and Lead Free Relay Information

### 1. General Information

- Relays produced after the specific date code that is indicated on each data sheet are lead-free now. Most of our signal and power relays are lead-free. Please refer to Lead-Free Status Info. (<http://www.fujitsu.com/us/downloads/MICRO/fcai/relays/lead-free-letter.pdf>)
- Lead free solder paste currently used in relays is Sn-3.0Ag-0.5Cu.
- All signal and most power relays also comply with RoHS. Please refer to individual data sheets. Relays that are RoHS compliant do not contain the 5 hazardous materials that are restricted by RoHS directive (lead, mercury, chromium IV, PBB, PBDE).
- It has been verified that using lead-free relays in lead assembly process will not cause any problems (compatible).
- "LF" is marked on each outer and inner carton. (No marking on individual relays).
- To avoid lead relays (for lead-free sample, etc.) please consult with area sales office.
- We will ship lead relays as long as the lead relay inventory exists.

Note: Cadmium was exempted from RoHS on October 21, 2005. (Amendment to Directive 2002/95/EC)

### 2. Recommended Lead Free Solder Profile

- Recommended solder paste Sn-3.0Ag-0.5Cu.

#### Reflow Solder condition

**Flow Solder condition:**

Pre-heating: maximum 120°C  
Soldering: dip within 5 sec. at  
260°C solder bath

**Solder by Soldering Iron:**

Soldering Iron  
Temperature: maximum 360°C  
Duration: maximum 3 sec.

**We highly recommend that you confirm your actual solder conditions**

### 3. Moisture Sensitivity

- Moisture Sensitivity Level standard is not applicable to electromechanical relays.

### 4. Tin Whisker

- Dipped SnAgCu solder is known as low risk tin whisker. No considerable length whisker was found by our in house test.

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Rev. June16/2006