

SPECIFICATION

IRV

SUBMINIATURE POWER RELAY

CONTACT DATA

| | | | |
|-------------------------------|-----------------------------|-----------------------|----|
| Contact arrangement | 2C | 3C | 4C |
| Contact resistance | 100mΩ (at 1A 6VDC) | | |
| Contact material | Silver Alloy | | |
| Contact rating (Res. load) | 7A 240VAC 7A 30VDC | 5A 240VAC 5A 28VDC | |
| Minimum load | 100mA 5VDC | | |
| Max. switching voltage | 240VAC / 30VDC | 240VAC / 28VDC | |
| Max. switching current | 7A | 5A | |
| Max. switching power | 1680VAC / 210W/200VA / 140W | | |
| Mechanical endurance | 1 x 10 ⁷ ops | | |
| Electrical endurance | 1 x 10 ⁵ ops | | |

CHARACTERISTICS

| | | |
|-------------------------------|--------------------------|---------------|
| Insulation resistance | 100MΩ (at 500VDC) | |
| Dielectric strength | Between contacts | 1000VAC 1min |
| | Between contact & coil | 1500VAC 1min |
| Operate time (at nomi. Volt.) | 25ms max. | |
| Release time (at nomi. Volt.) | 25ms max. | |
| Shock resistance | Functional | 20G |
| | Destructive | 100G |
| Vibration resistance | 10Hz to 55Hz 1.5mm DA | |
| Humidity | 40% to 85% RH | |
| Ambient temperature | -40°C to 70°C | |
| Max. Switching Frequency | Mechanical | 18,000 ops/hr |
| | Electrical | 1,800 ops/hr |
| Termination | PCB | |
| Unit weight | Approx. 35g | |
| Construction | Wash tight, Flux proofed | |

COIL

| | |
|------------|---------------|
| Coil power | 900mW / 1.2VA |
|------------|---------------|

COIL DATA

at 20°C

(DC : 900mW)

| Nominal Voltage VDC | Pick-up Voltage VDC | Drop-out Voltage VDC | Rated Current mA | Coil Resistance Ω |
|---------------------|---------------------|----------------------|------------------|-------------------|
| 5 | 3.75 | 0.5 | 178.5 | 28 x (1±10%) |
| 6 | 4.5 | 0.6 | 150 | 40 x (1±10%) |
| 12 | 9 | 1.2 | 75 | 160 x (1±10%) |
| 24 | 18 | 2.4 | 37.5 | 640 x (1±10%) |
| 48 | 36 | 4.8 | 18.75 | 2560 x (1±10%) |
| 110/120 | 82.5 | 11 | 10 | 11000 x (1±10%) |

COIL DATA

at 23°C

(AC : 1.2VA)

| Nominal Voltage VDC | Pick-up Voltage VDC | Drop-out Voltage VDC | Coil Resistance Ω |
|---------------------|---------------------|----------------------|-------------------|
| 6 | 4.8 | 1.2 | 11.5 x (1±10%) |
| 12 | 9.6 | 2.4 | 46 x (1±10%) |
| 24 | 19.2 | 4.8 | 180 x (1±10%) |
| 48 | 38.4 | 9.6 | 735 x (1±10%) |
| 110/120 | 88 | 22 | 4550 x (1±10%) |
| 220/240 | 176 | 44 | 14400 x (1±10%) |

Notes : 1) The data shown above are initial values.
2) Please find coil temperature curve in the characteristic curves below.

ORDERING INFORMATION

| | | | | | | |
|--------------------------|---|------------|------------|----------|----------|----------|
| | IRV | -2C | D12 | S | F | L |
| Type | | | | | | |
| Contact Form | 2C : 2 Form C, 3C : 3 Form C, 4C : 4 Form C | | | | | |
| Coil Voltage | 5, 6, 12, 24, 48, 110, 120VDC 6, 12, 24, 48, 110, 220/240VAC | | | | | |
| Construction | S : Socket Type P : PCB Type | | | | | |
| Insulation System | F : class F Nil : standard | | | | | |
| LED Type | L : with LED Nil : Standard | | | | | |

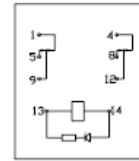
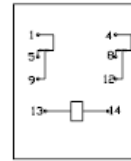
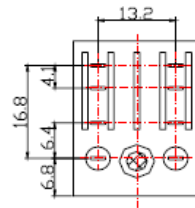
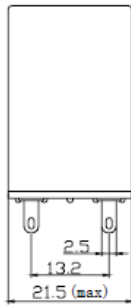
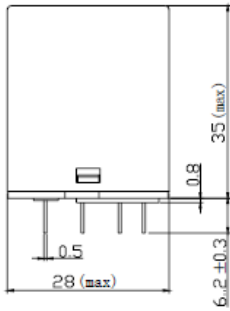
SAFETY APPROVAL RATINGS

| | | 2C, 3C | 4C |
|----|--------------|-----------------------|-----------------------|
| UL | 12 to 110VDC | 7A 240VAC 7A 30VDC | 5A 240VAC 5A 28VDC |
| | 24 to 240VAC | | |

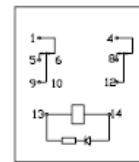
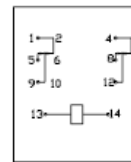
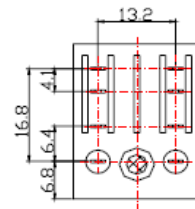
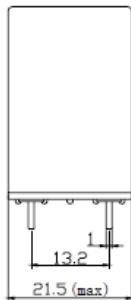
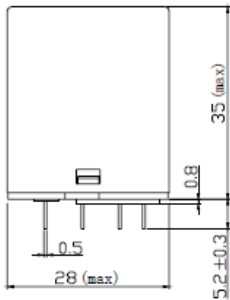
OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Unit:mm

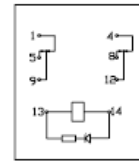
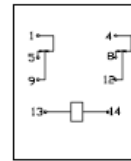
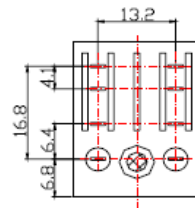
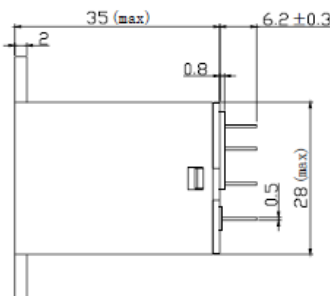
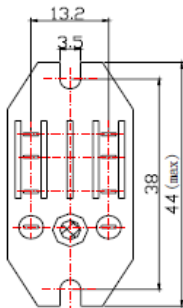
2C



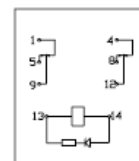
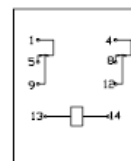
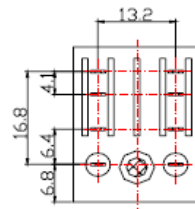
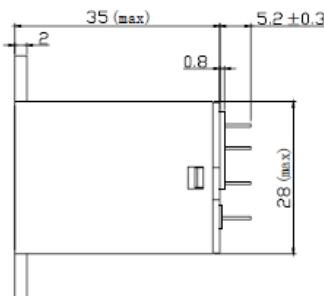
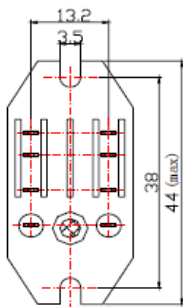
SOKET Type



PIN Type



SOKET Type

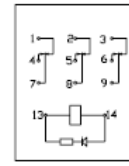
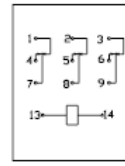
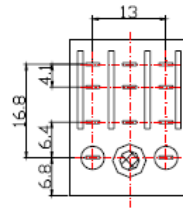
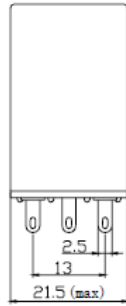
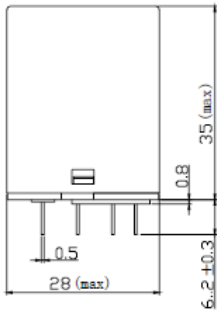


PIN Type

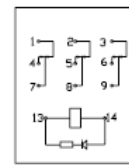
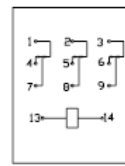
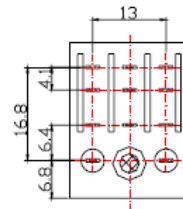
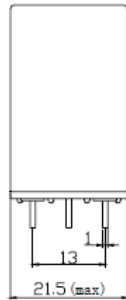
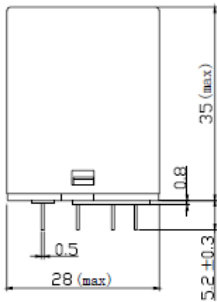
OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Unit:mm

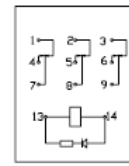
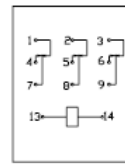
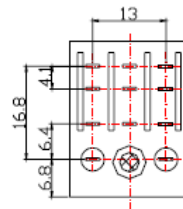
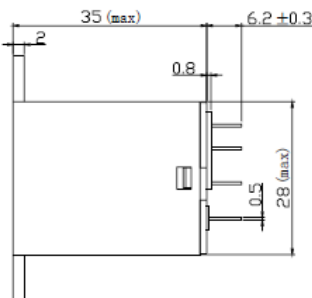
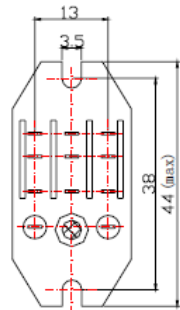
3C



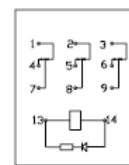
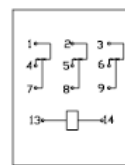
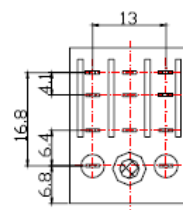
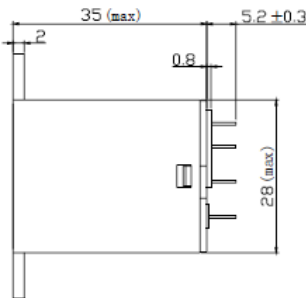
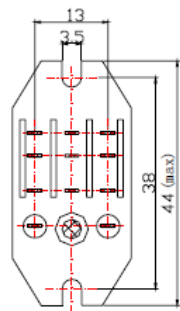
SOKET Type



PIN Type



SOKET Type

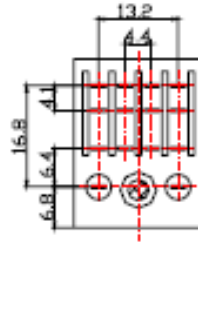
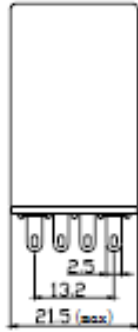
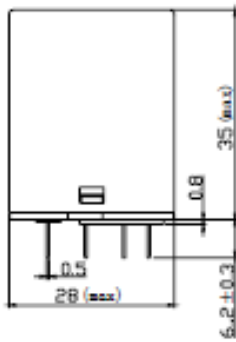


PIN Type

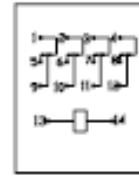
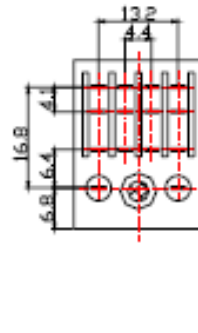
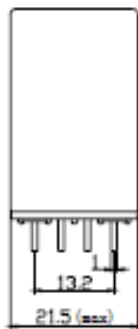
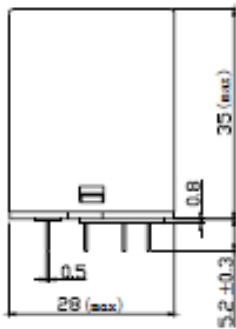
OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT CHARACTERISTIC CURVES

Unit:mm

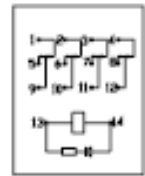
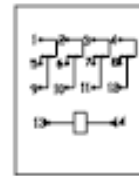
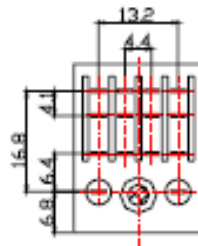
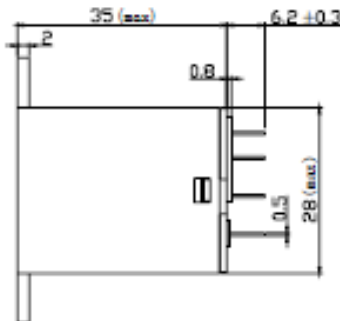
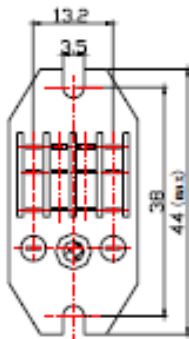
4C



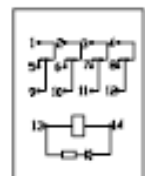
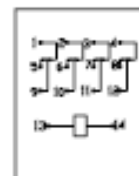
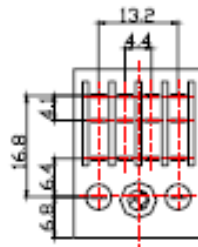
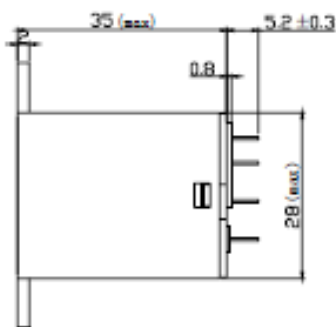
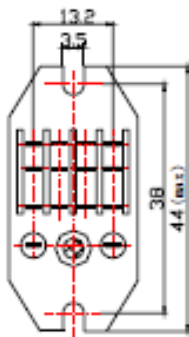
SOKET Type



PIN Type



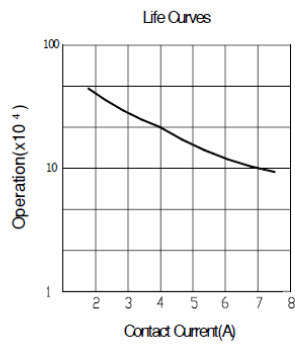
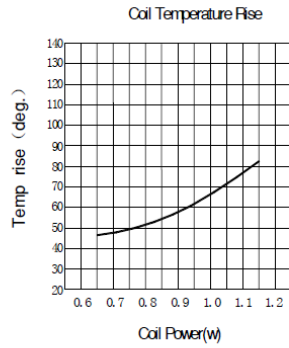
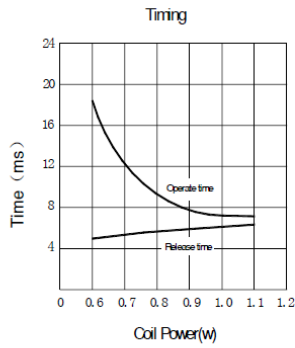
SOKET Type



PIN Type

CHARACTERISTIC CURVES

2C, 3C



4C

