

**PCB**
**TRA1H**

- 16A switching capability
- Sealed version available
- Transparent sealed available
- Class B/F available
- Conform to RoHS,ELV directive


**ORDERING CODE**

|  |          |   |              |                           |          |   |          |
|--|----------|---|--------------|---------------------------|----------|---|----------|
| <u>TRA1H</u>                                   | <u>D</u> | — | <u>12VDC</u> | —                         | <u>S</u> | — | <u>H</u> |
| 1  | 2        |   | 3            |                           | 4        |   | 5        |
| 1. Relay Model                                 |          |   |              | 4. S: Sealed              |          |   |          |
| 2. Coil Power<br>D=0.72W, L=0.54W              |          |   |              | 5. Z: Form C<br>H: Form A |          |   |          |
| 3. Coil Nominal Voltage<br>3,5,6,9,12,24,48VDC |          |   |              |                           |          |   |          |

**COIL DATA** at 20°C)

| Nominal Voltage (VDC)                 | 3    | 5    | 6          | 9    | 12   | 24   | 48   |       |
|---------------------------------------|------|------|------------|------|------|------|------|-------|
| Coil Resistance ( $\Omega \pm 10\%$ ) | 17   | 46   | 67         | 150  | 270  | 1050 | 4250 | 0.54W |
| Rated Current (mA)                    | 180  | 108  | 90         | 60   | 45   | 22.5 | 11.3 |       |
| Max Operate Voltage (VDC)             | 2.4  | 4    | 4.8        | 7.2  | 9.6  | 19.2 | 38.4 |       |
| Min Release Voltage (VDC)             | 0.15 | 0.25 | 0.3        | 0.45 | 0.6  | 1.2  | 2.4  |       |
| Coil Resistance ( $\Omega \pm 10\%$ ) | 13   | 35   | 50         | 110  | 200  | 800  | 3200 |       |
| Rated Current (mA)                    | 240  | 144  | 120        | 80   | 60   | 30   | 15   |       |
| Max Operate Voltage (VDC)             | 2.4  | 4    | 4.8        | 7.2  | 9.6  | 19.2 | 38.4 |       |
| Min Release Voltage (VDC)             | 0.15 | 0.25 | 0.3        | 0.45 | 0.6  | 1.2  | 2.4  |       |
| Max Applicable Voltage                | 70°C |      | 130%, 23°C |      | 170% |      |      |       |

**CONTACT DATA**

|                       |  |
|-----------------------|--|
| Contact Form          | 1H/1Z  |
| Contact Material      | Silver Alloy   |
| Load                  | Resistive load(COS $\Phi$ =1)                              |
| Contact Ratings       | 16A 250VAC<br>16A 30VDC                                    |
| Minimum load          | 100mA 5VDC   |
| Max Switching Voltage | 250VAC/30VDC   |
| Max Switching Current | 16A  |
| Max Switching Power   | 4000VA/480W  |
| Contact Resistance    | 100m $\Omega$ Max at 6VDC 1A                               |
| Life Expectancy       | Electrical : 100,000 Operations(at30Operations/minute)     |
|                       | Mechanical : 10,000,000 Operations(at300Operations/minute) |

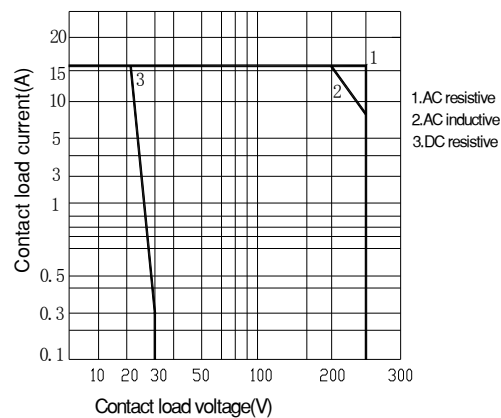
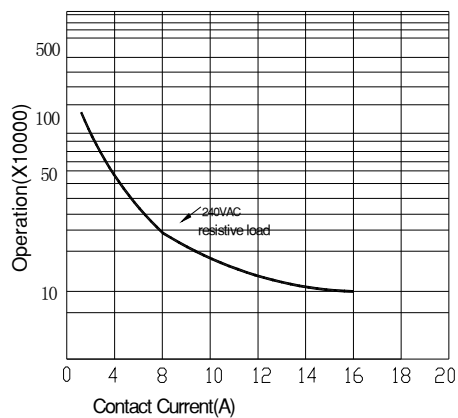
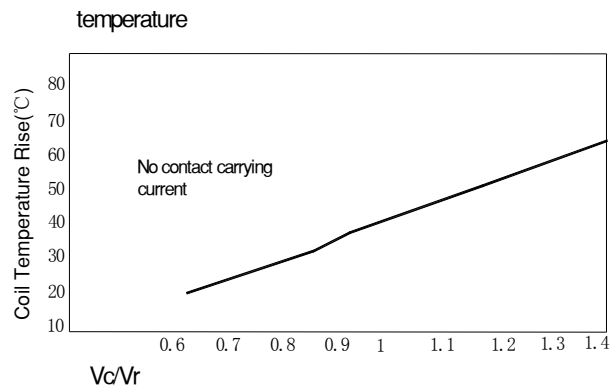
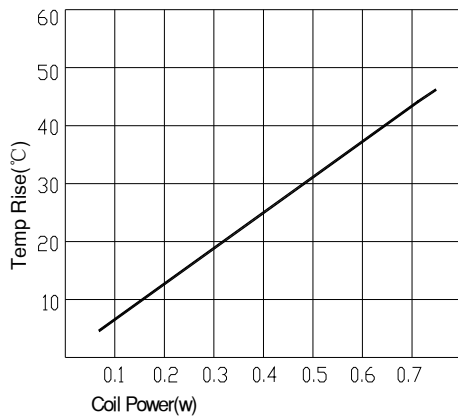
## ■ CHARACTERISTICS DATA

|   |                                 |
|---|---------------------------------|
| Insulation Resistance                     | 100M $\Omega$ Min at 500VDC     |
| Dielectric Strength Between Open Contacts | 1000VAC(for one minute)         |
| Between Contacts and coil                 | 5000VAC(for one minute)         |
| Operate Time                              | 20ms                            |
| Release Time                              | 10ms                            |
| Temperature Range                         | -40°C to +70°C                  |
| Shock Resistance                          | Operating Extremes : 10G 11ms   |
|   | Damage Limits : 100G 6ms        |
| Vibration Resistance                      | 10-55Hz, 1.5mm                  |
| Max. switching frequency                  | Mechanical: 18,000operations/hr |
|   | Electrical: 1,800operations/hr  |
| Humidity                                  | 40-85%                          |
| Weight                                    | Approx 14g                      |
| Safety Standard                           | UL cUL                          |

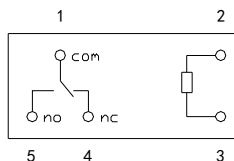
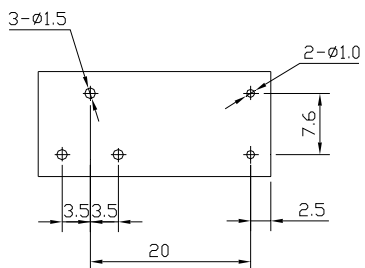
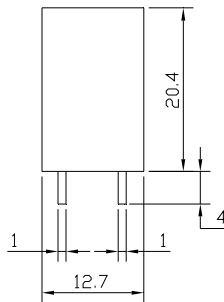
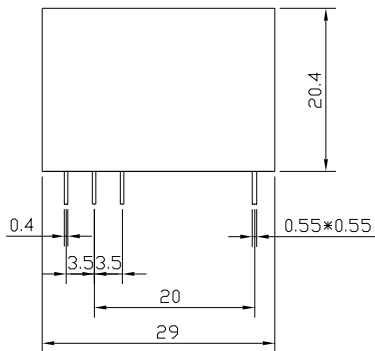
## ■ APPROVED STANDARDS

| Model( ) | Coiling rating | Safety Standard | Contact rating          |
|----------|----------------|-----------------|-------------------------|
| TRA1H    | 3 to 48VDC     | UL/cUL          | 16A 250VAC<br>16A 30VDC |

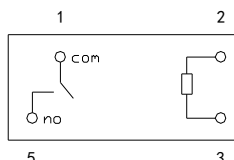
## ■ ENGINEERING DATA



■ OVERALL AND MOUNTING DIMENSIONS



Form C



Form A