

Overview

The TRS Thermal Reed Switch is a highly reliable, precise temperature-sensitive switch ideal for energy conservation.

Its unique proprietary design features a magnet and a temperature-sensing soft ferromagnetic substance called Thermorite®. The material's magnetic flux density decreases as the temperature increases turning it into a paramagnetic substance at the Curie temperature.

These products have also been attested by the International Relay Association.

Applications

Typical applications include temperature detection and overheat monitoring of electric appliances, heat-retention heater control for rice cookers, defrost for air conditioners and vending machines, roll heater temperature control for copying machines, radiator water temperature detection for automotive electric fan control.

Benefits

- High reliability for on/off operations
- High-speed response
- Long operational life
- Excellent environmental durability
- Extremely simple circuit design
- Compact, light and easy to handle
- Dust, explosion and corrosion-proof
- Wide range of operating temperatures available from -10°C to $+130^{\circ}\text{C}$
- Excellent temperature accuracy of $\pm 2.5^{\circ}\text{C}$
- UL and CSA approved for TRS5***BLRU 100V
- UL approved for TRS5***BLRVU 200V
- RoHS/REACH compliant

Axial Type



Wire Harness Type



Case Type



Molded Type



Ordering Information

| M- | TRS | 3- | 50 | | | M | CR | 00 | V | U |
|----------------------|--------|--|--|--|--|-----------------------|--|--|----------------------------|---|
| Shape | Series | Maximum Opening/Closing Power (W) | Operating Temperature (°C) | | | Contact Type | Shape Classification | Lead Type | Rated Voltage (VDC) | Approvals |
| Blank M = Mold | TRS | 1 = 10.0 W 3 = 35.0 W 5 = 60.5 W | M10 = -10°C 0 = 0°C 5 = 5°C 10 = 10°C 15 = 15°C 20 = 20°C 25 = 25°C 30 = 30°C 35 = 35°C 40 = 40°C | 45 = 45°C 50 = 50°C 55 = 55°C 60 = 60°C 65 = 65°C 70 = 70°C 75 = 75°C 80 = 80°C 85 = 85°C 90 = 90°C | 95 = 95°C 100 = 100°C 105 = 105°C 110 = 110°C 115 = 115°C 120 = 120°C 125 = 125°C 130 = 130°C | B = Break M = Make | Blank = Molded axial CR = C shape fixing bar LR = L shape fixing bar SR = S shape | Blank 00 = Wire harness 01 = Lead terminal 01E = Lead terminal (S shape only) | Blank = 100 V V = 200 V | Blank = No approvals U = UL and CSA approved for 100 V and UL approved for 200 V |

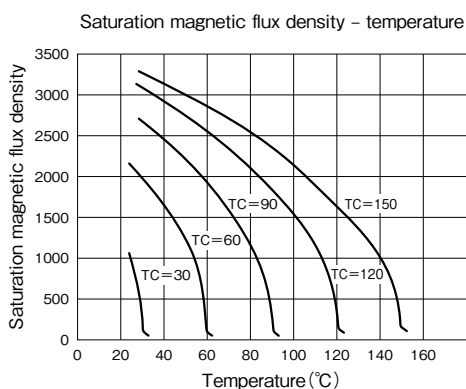
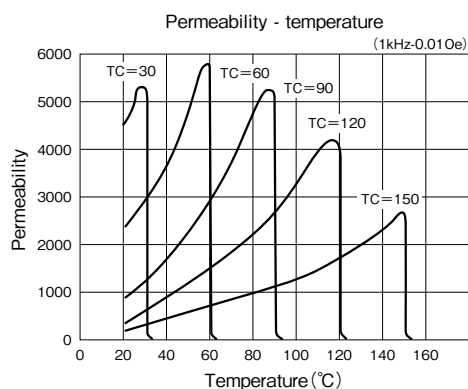
Structures and Principles of Operation

Thermal Reed Switches (TRS) are temperature-sensing switches composed of a magnet and a temperature-sensing soft ferromagnetic substance called Thermorite. This material's saturation magnetic flux density decreases as the temperature increases, and it turns into a paramagnetic substance at its Curie temperature.

Thermorite properties

- Thermorite changes its magnetic property rapidly at its Curie temperature, providing quick response times.
- The Curie temperature of Thermorite does not vary with time, as it is based on a compounding ratio.
- Thermorite is stable against moisture and hazardous gas.

Thermal property of Thermorite

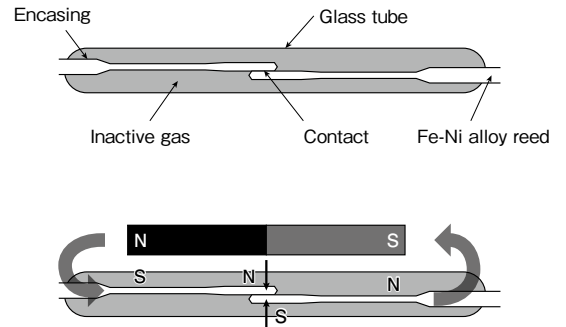


TC=Curie temperature

Structures and Principles of Operation cont'd

Reed switch structure

- The reed switch is a contact switch comprised of a pair of Fe-Ni alloy reeds encased in a glass tube with inactive gas. The reeds are switched on or off by the magnetic field of a permanent magnet or magnet coil.
- The reeds in the glass tube become magnetized from the magnetic field, allowing the two reeds to make contact and connect (switch on). When the magnetic field disappears, the reeds separate and disconnect (switch off).
- The glass encasement of the reeds ensures high environmental resistance and a long operational life.



TRS principle: Break (B) type

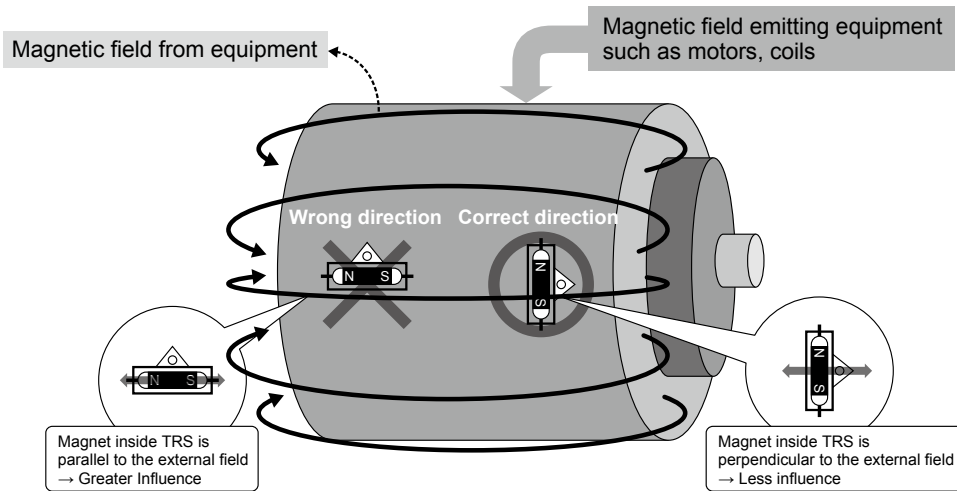


TRS principle: Make (M) type

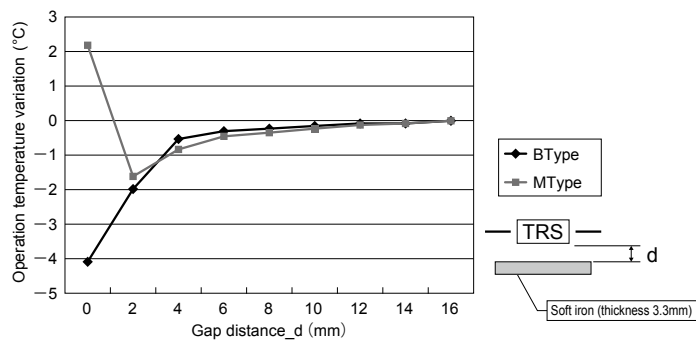


External Magnetic Field

TRS installation in external magnetic field



Ferromagnetic material influence



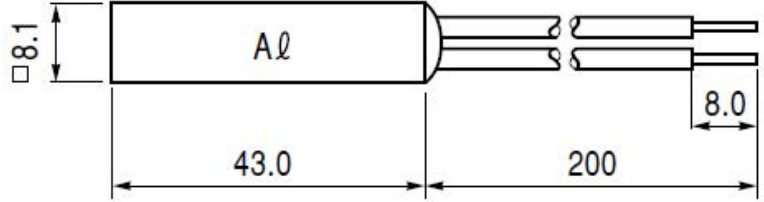
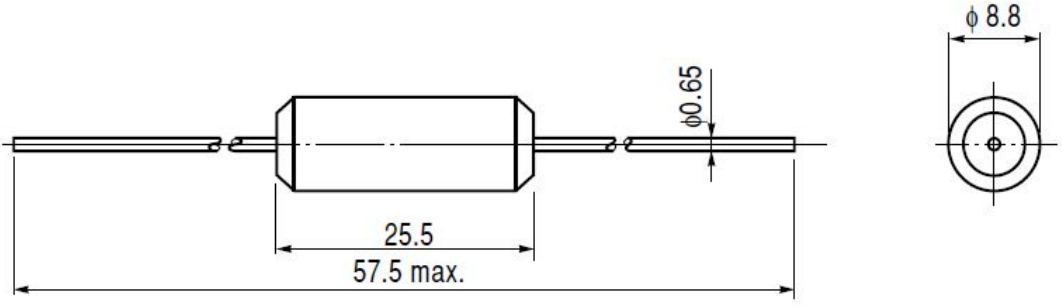
Dimensions – Millimeters

| Part Number | Dimensions - Millimeters |
|---------------------------------|--------------------------|
| TRS5-***BLR00 TRS5-***BLR00V | |
| TRS1-***MLR00V TRS3-***MLR00 | |
| TRS5-***BLRU TRS5-***BLRVU | |

Dimensions – Millimeters cont.

| Part Number | Dimensions - Millimeters |
|--|--------------------------|
| TRS1-***MCR01V TRS3-***MCR01 TRS5-***BCR01 TRS5-***BCR01V | |
| TRS5-***BCR00 TRS5-***BCR00V | |
| TRS1-***MCR00V TRS3-***MCR00 | |

Dimensions – Millimeters cont.

| Part Number | Dimensions - Millimeters |
|--|---|
| TRS1-***MSR01EV TRS3-***MSR01E TRS5-***BSR01E TRS5-***BSR01EV |  <p>Technical drawing showing a cylindrical component with a diameter of 8.1 mm. The main body length is 43.0 mm. A section of length 200 mm is shown extending from the right end, with an offset of 8.0 mm from the end of the main body.</p> |
| M-TRS5-***B |  <p>Technical drawing showing a cylindrical component with a length of 25.5 mm and a total length of 57.5 mm maximum. The diameter is 8.8 mm. A section of diameter 0.65 mm is shown extending from the right end.</p> |

Environmental Compliance

All KEMET DC Line Filters are RoHS Compliant.



Insulation & Temperature Characteristics

| Shape Type | Insulation Withstand Voltage ¹ | Minimum Insulation Resistance ¹ | Operating Temperature Range | Switching Temperature Range | Switching Temperature Precision ² | Differential Temperature ³ |
|------------|--|--|-----------------------------|-----------------------------|--|---------------------------------------|
| CR00 | 1,500 VAC/1 minute or 1,800 VAC/1 second | 500 VDC to 100 MΩ | -20°C to +130°C | 0°C to +130°C | ±2.5°C | 10°C Maximum" |
| CR01 | | | | | | |
| LR00 | | | | | | |
| LRU | | | | | | |
| SR01E | | | -20°C to +100°C | -10°C to +100°C | | |
| M-TRS | 1,000 VAC/1 minute or 1,200 VAC/1 second | | -20°C to +150°C | -10°C to +130°C | | |

¹ Between wire harness and mounting resin surface.

² Switching temperature precision does not include measurement error.

³ The differential temperature is also referred to as the hysteresis temperature on thermal sensors.

Table 1 – Ratings & Part Number Reference

| Part Number | Switching Temperature (°C) | Maximum Differential Temperature (°C) | Contact Type | Maximum Opening/Closing Voltage (V) | Maximum Opening/Closing Current (A) | Maximum Opening/Closing Power (W) | Minimum Opening/Closing Current | Maximum Contact Resistance (mΩ) | Weight (g) | Approval |
|----------------|----------------------------|---------------------------------------|--------------|-------------------------------------|-------------------------------------|-----------------------------------|---------------------------------|---------------------------------|------------|----------|
| TRS1-0MCR00V | 0°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 150 | 8.1 | - |
| TRS1-10MCR00V | 10°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 150 | 8.1 | - |
| TRS1-20MCR00V | 20°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 150 | 8.1 | - |
| TRS1-30MCR00V | 30°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 150 | 8.1 | - |
| TRS1-40MCR00V | 40°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 150 | 8.1 | - |
| TRS1-50MCR00V | 50°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 150 | 8.1 | - |
| TRS1-60MCR00V | 60°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 150 | 8.1 | - |
| TRS1-70MCR00V | 70°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 150 | 8.1 | - |
| TRS1-80MCR00V | 80°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 150 | 8.1 | - |
| TRS1-90MCR00V | 90°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 150 | 8.1 | - |
| TRS1-100MCR00V | 100°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 150 | 8.1 | - |
| TRS1-110MCR00V | 110°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 150 | 8.1 | - |
| TRS1-120MCR00V | 120°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 150 | 8.1 | - |
| TRS1-0MCR01V | 0°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 150 | 3.4 | - |
| TRS1-10MCR01V | 10°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 150 | 3.4 | - |
| TRS1-20MCR01V | 20°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 150 | 3.4 | - |
| TRS1-30MCR01V | 30°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 150 | 3.4 | - |
| TRS1-40MCR01V | 40°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 150 | 3.4 | - |
| TRS1-50MCR01V | 50°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 150 | 3.4 | - |
| TRS1-60MCR01V | 60°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 150 | 3.4 | - |
| TRS1-70MCR01V | 70°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 150 | 3.4 | - |

Table 1 – Ratings & Part Number Reference cont.

| Part Number | Switching Temperature (°C) | Maximum Differential Temperature (°C) | Contact Type | Maximum Opening/Closing Voltage (V) | Maximum Opening/Closing Current (A) | Maximum Opening/Closing Power (W) | Minimum Opening/Closing Current | Maximum Contact Resistance (mΩ) | Weight (g) | Approval |
|-----------------|----------------------------|---------------------------------------|--------------|-------------------------------------|-------------------------------------|-----------------------------------|---------------------------------|---------------------------------|------------|----------|
| TRS1-80MCR01V | 80°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 150 | 3.4 | - |
| TRS1-90MCR01V | 90°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 150 | 3.4 | - |
| TRS1-100MCR01V | 100°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 150 | 3.4 | - |
| TRS1-110MCR01V | 110°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 150 | 3.4 | - |
| TRS1-120MCR01V | 120°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 150 | 3.4 | - |
| TRS1-0MLR00V | 0°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 150 | 8.5 | - |
| TRS1-10MLR00V | 10°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 150 | 8.5 | - |
| TRS1-20MLR00V | 20°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 150 | 8.5 | - |
| TRS1-30MLR00V | 30°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 150 | 8.5 | - |
| TRS1-40MLR00V | 40°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 150 | 8.5 | - |
| TRS1-50MLR00V | 50°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 150 | 8.5 | - |
| TRS1-60MLR00V | 60°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 150 | 8.5 | - |
| TRS1-70MLR00V | 70°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 150 | 8.5 | - |
| TRS1-80MLR00V | 80°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 150 | 8.5 | - |
| TRS1-90MLR00V | 90°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 150 | 8.5 | - |
| TRS1-100MLR00V | 100°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 150 | 8.5 | - |
| TRS1-110MLR00V | 110°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 150 | 8.5 | - |
| TRS1-120MLR00V | 120°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 150 | 8.5 | - |
| TRS1-130MLR00V | 130°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 150 | 8.5 | - |
| TRS1-M10MSR01EV | -10°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 300 | 7.2 | - |
| TRS1-0MSR01EV | 0°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 300 | 7.2 | - |
| TRS1-10MSR01EV | 10°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 300 | 7.2 | - |
| TRS1-20MSR01EV | 20°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 300 | 7.2 | - |
| TRS1-30MSR01EV | 30°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 300 | 7.2 | - |
| TRS1-40MSR01EV | 40°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 300 | 7.2 | - |
| TRS1-50MSR01EV | 50°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 300 | 7.2 | - |
| TRS1-60MSR01EV | 60°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 300 | 7.2 | - |
| TRS1-70MSR01EV | 70°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 300 | 7.2 | - |
| TRS1-80MSR01EV | 80°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 300 | 7.2 | - |
| TRS1-90MSR01EV | 90°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 300 | 7.2 | - |
| TRS1-100MSR01EV | 100°C ±2.5°C | 10°C | Make | 220 AC | 0.045 AC | 10.0 AC | 1 mA/5 VDC | 300 | 7.2 | - |
| TRS3-0MCR00 | 0°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 150 | 8.1 | - |
| TRS3-10MCR00 | 10°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 150 | 8.1 | - |
| TRS3-20MCR00 | 20°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 150 | 8.1 | - |
| TRS3-30MCR00 | 30°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 150 | 8.1 | - |
| TRS3-40MCR00 | 40°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 150 | 8.1 | - |
| TRS3-50MCR00 | 50°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 150 | 8.1 | - |
| TRS3-60MCR00 | 60°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 150 | 8.1 | - |
| TRS3-70MCR00 | 70°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 150 | 8.1 | - |
| TRS3-80MCR00 | 80°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 150 | 8.1 | - |
| TRS3-90MCR00 | 90°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 150 | 8.1 | - |

Table 1 – Ratings & Part Number Reference cont.

| Part Number | Switching Temperature (°C) | Maximum Differential Temperature (°C) | Contact Type | Maximum Opening/Closing Voltage (V) | Maximum Opening/Closing Current (A) | Maximum Opening/Closing Power (W) | Minimum Opening/Closing Current | Maximum Contact Resistance (mΩ) | Weight (g) | Approval |
|----------------|----------------------------|---------------------------------------|--------------|-------------------------------------|-------------------------------------|-----------------------------------|---------------------------------|---------------------------------|------------|----------|
| TRS3-100MCR00 | 100°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 150 | 8.1 | - |
| TRS3-110MCR00 | 110°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 150 | 8.1 | - |
| TRS3-120MCR00 | 120°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 150 | 8.1 | - |
| TRS3-0MCR01 | 0°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 150 | 3.4 | - |
| TRS3-10MCR01 | 10°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 150 | 3.4 | - |
| TRS3-20MCR01 | 20°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 150 | 3.4 | - |
| TRS3-30MCR01 | 30°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 150 | 3.4 | - |
| TRS3-40MCR01 | 40°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 150 | 3.4 | - |
| TRS3-50MCR01 | 50°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 150 | 3.4 | - |
| TRS3-60MCR01 | 60°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 150 | 3.4 | - |
| TRS3-70MCR01 | 70°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 150 | 3.4 | - |
| TRS3-80MCR01 | 80°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 150 | 3.4 | - |
| TRS3-90MCR01 | 90°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 150 | 3.4 | - |
| TRS3-100MCR01 | 100°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 150 | 3.4 | - |
| TRS3-110MCR01 | 110°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 150 | 3.4 | - |
| TRS3-120MCR01 | 120°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 150 | 3.4 | - |
| TRS3-0MLR00 | 0°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 150 | 8.5 | - |
| TRS3-10MLR00 | 10°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 150 | 8.5 | - |
| TRS3-20MLR00 | 20°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 150 | 8.5 | - |
| TRS3-30MLR00 | 30°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 150 | 8.5 | - |
| TRS3-40MLR00 | 40°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 150 | 8.5 | - |
| TRS3-50MLR00 | 50°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 150 | 8.5 | - |
| TRS3-60MLR00 | 60°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 150 | 8.5 | - |
| TRS3-70MLR00 | 70°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 150 | 8.5 | - |
| TRS3-80MLR00 | 80°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 150 | 8.5 | - |
| TRS3-90MLR00 | 90°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 150 | 8.5 | - |
| TRS3-100MLR00 | 100°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 150 | 8.5 | - |
| TRS3-110MLR00 | 110°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 150 | 8.5 | - |
| TRS3-120MLR00 | 120°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 150 | 8.5 | - |
| TRS3-130MLR00 | 130°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 150 | 8.5 | - |
| TRS3-M10MSR01E | -10°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 300 | 7.2 | - |
| TRS3-0MSR01E | 0°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 300 | 7.2 | - |
| TRS3-10MSR01E | 10°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 300 | 7.2 | - |
| TRS3-20MSR01E | 20°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 300 | 7.2 | - |
| TRS3-30MSR01E | 30°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 300 | 7.2 | - |
| TRS3-40MSR01E | 40°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 300 | 7.2 | - |
| TRS3-50MSR01E | 50°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 300 | 7.2 | - |
| TRS3-60MSR01E | 60°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 300 | 7.2 | - |
| TRS3-70MSR01E | 70°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 300 | 7.2 | - |
| TRS3-80MSR01E | 80°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 300 | 7.2 | - |
| TRS3-90MSR01E | 90°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 300 | 7.2 | - |

Table 1 – Ratings & Part Number Reference cont.

| Part Number | Switching Temperature (°C) | Maximum Differential Temperature (°C) | Contact Type | Maximum Opening/Closing Voltage (V) | Maximum Opening/Closing Current (A) | Maximum Opening/Closing Power (W) | Minimum Opening/Closing Current | Maximum Contact Resistance (mΩ) | Weight (g) | Approval |
|----------------|----------------------------|---------------------------------------|--------------|-------------------------------------|-------------------------------------|-----------------------------------|---------------------------------|---------------------------------|------------|----------|
| TRS3-100MSR01E | 100°C ±2.5°C | 10°C | Make | 140 AC/200 DC | 0.500 AC/DC | 35.0 AC/10.0 DC | 1 mA/5 VDC | 300 | 7.2 | - |
| TRS5-0BCR00 | 0°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 6.8 | - |
| TRS5-10BCR00 | 10°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 6.8 | - |
| TRS5-20BCR00 | 20°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 6.8 | - |
| TRS5-30BCR00 | 30°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 6.8 | - |
| TRS5-40BCR00 | 40°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 6.8 | - |
| TRS5-50BCR00 | 50°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 6.8 | - |
| TRS5-60BCR00 | 60°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 6.8 | - |
| TRS5-70BCR00 | 70°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 6.8 | - |
| TRS5-80BCR00 | 80°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 6.8 | - |
| TRS5-90BCR00 | 90°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 6.8 | - |
| TRS5-100BCR00 | 100°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 6.8 | - |
| TRS5-110BCR00 | 110°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 6.8 | - |
| TRS5-120BCR00 | 120°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 6.8 | - |
| TRS5-0BCR00V | 0°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 6.8 | - |
| TRS5-10BCR00V | 10°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 6.8 | - |
| TRS5-20BCR00V | 20°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 6.8 | - |
| TRS5-30BCR00V | 30°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 6.8 | - |
| TRS5-40BCR00V | 40°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 6.8 | - |
| TRS5-50BCR00V | 50°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 6.8 | - |
| TRS5-60BCR00V | 60°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 6.8 | - |
| TRS5-70BCR00V | 70°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 6.8 | - |
| TRS5-80BCR00V | 80°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 6.8 | - |
| TRS5-90BCR00V | 90°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 6.8 | - |
| TRS5-100BCR00V | 100°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 6.8 | - |
| TRS5-110BCR00V | 110°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 6.8 | - |
| TRS5-120BCR00V | 120°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 6.8 | - |
| TRS5-0BCR01 | 0°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 3.1 | - |
| TRS5-10BCR01 | 10°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 3.1 | - |
| TRS5-20BCR01 | 20°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 3.1 | - |
| TRS5-30BCR01 | 30°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 3.1 | - |
| TRS5-40BCR01 | 40°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 3.1 | - |
| TRS5-50BCR01 | 50°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 3.1 | - |
| TRS5-60BCR01 | 60°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 3.1 | - |
| TRS5-70BCR01 | 70°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 3.1 | - |
| TRS5-80BCR01 | 80°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 3.1 | - |
| TRS5-90BCR01 | 90°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 3.1 | - |
| TRS5-100BCR01 | 100°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 3.1 | - |
| TRS5-110BCR01 | 110°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 3.1 | - |
| TRS5-120BCR01 | 120°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 3.1 | - |
| TRS5-0BCR01V | 0°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 3.1 | - |

Table 1 – Ratings & Part Number Reference cont.

| Part Number | Switching Temperature (°C) | Maximum Differential Temperature (°C) | Contact Type | Maximum Opening/Closing Voltage (V) | Maximum Opening/Closing Current (A) | Maximum Opening/Closing Power (W) | Minimum Opening/Closing Current | Maximum Contact Resistance (mΩ) | Weight (g) | Approval |
|----------------|----------------------------|---------------------------------------|--------------|-------------------------------------|-------------------------------------|-----------------------------------|---------------------------------|---------------------------------|------------|----------|
| TRS5-10BCR01V | 10°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 3.1 | - |
| TRS5-20BCR01V | 20°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 3.1 | - |
| TRS5-30BCR01V | 30°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 3.1 | - |
| TRS5-40BCR01V | 40°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 3.1 | - |
| TRS5-50BCR01V | 50°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 3.1 | - |
| TRS5-60BCR01V | 60°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 3.1 | - |
| TRS5-70BCR01V | 70°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 3.1 | - |
| TRS5-80BCR01V | 80°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 3.1 | - |
| TRS5-90BCR01V | 90°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 3.1 | - |
| TRS5-100BCR01V | 100°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 3.1 | - |
| TRS5-110BCR01V | 110°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 3.1 | - |
| TRS5-120BCR01V | 120°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 3.1 | - |
| TRS5-0BLR00 | 0°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 7.3 | - |
| TRS5-10BLR00 | 10°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 7.3 | - |
| TRS5-20BLR00 | 20°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 7.3 | - |
| TRS5-30BLR00 | 30°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 7.3 | - |
| TRS5-40BLR00 | 40°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 7.3 | - |
| TRS5-50BLR00 | 50°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 7.3 | - |
| TRS5-60BLR00 | 60°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 7.3 | - |
| TRS5-70BLR00 | 70°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 7.3 | - |
| TRS5-80BLR00 | 80°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 7.3 | - |
| TRS5-90BLR00 | 90°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 7.3 | - |
| TRS5-100BLR00 | 100°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 7.3 | - |
| TRS5-110BLR00 | 110°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 7.3 | - |
| TRS5-120BLR00 | 120°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 7.3 | - |
| TRS5-130BLR00 | 130°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 7.3 | - |
| TRS5-0BLR00V | 0°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 7.3 | - |
| TRS5-10BLR00V | 10°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 7.3 | - |
| TRS5-20BLR00V | 20°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 7.3 | - |
| TRS5-30BLR00V | 30°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 7.3 | - |
| TRS5-40BLR00V | 40°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 7.3 | - |
| TRS5-50BLR00V | 50°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 7.3 | - |
| TRS5-60BLR00V | 60°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 7.3 | - |
| TRS5-70BLR00V | 70°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 7.3 | - |
| TRS5-80BLR00V | 80°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 7.3 | - |
| TRS5-90BLR00V | 90°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 7.3 | - |
| TRS5-100BLR00V | 100°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 7.3 | - |
| TRS5-110BLR00V | 110°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 7.3 | - |
| TRS5-120BLR00V | 120°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 7.3 | - |
| TRS5-130BLR00V | 130°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 7.3 | - |
| TRS5-0BLRU | 0°C ±2.5°C | 10°C | Break | 140 AC | 0.500 AC | 50.0 AC | 1 mA/5 VDC | 150 | 8.5 | UL & CSA |

Table 1 – Ratings & Part Number Reference cont.

| Part Number | Switching Temperature (°C) | Maximum Differential Temperature (°C) | Contact Type | Maximum Opening/Closing Voltage (V) | Maximum Opening/Closing Current (A) | Maximum Opening/Closing Power (W) | Minimum Opening/Closing Current | Maximum Contact Resistance (mΩ) | Weight (g) | Approval |
|--------------|----------------------------|---------------------------------------|--------------|-------------------------------------|-------------------------------------|-----------------------------------|---------------------------------|---------------------------------|------------|----------|
| TRS5-5BLRU | 5°C ±2.5°C | 10°C | Break | 140 AC | 0.500 AC | 50.0 AC | 1 mA/5 VDC | 150 | 8.5 | UL & CSA |
| TRS5-10BLRU | 10°C ±2.5°C | 10°C | Break | 140 AC | 0.500 AC | 50.0 AC | 1 mA/5 VDC | 150 | 8.5 | UL & CSA |
| TRS5-15BLRU | 15°C ±2.5°C | 10°C | Break | 140 AC | 0.500 AC | 50.0 AC | 1 mA/5 VDC | 150 | 8.5 | UL & CSA |
| TRS5-20BLRU | 20°C ±2.5°C | 10°C | Break | 140 AC | 0.500 AC | 50.0 AC | 1 mA/5 VDC | 150 | 8.5 | UL & CSA |
| TRS5-25BLRU | 25°C ±2.5°C | 10°C | Break | 140 AC | 0.500 AC | 50.0 AC | 1 mA/5 VDC | 150 | 8.5 | UL & CSA |
| TRS5-30BLRU | 30°C ±2.5°C | 10°C | Break | 140 AC | 0.500 AC | 50.0 AC | 1 mA/5 VDC | 150 | 8.5 | UL & CSA |
| TRS5-35BLRU | 35°C ±2.5°C | 10°C | Break | 140 AC | 0.500 AC | 50.0 AC | 1 mA/5 VDC | 150 | 8.5 | UL & CSA |
| TRS5-40BLRU | 40°C ±2.5°C | 10°C | Break | 140 AC | 0.500 AC | 50.0 AC | 1 mA/5 VDC | 150 | 8.5 | UL & CSA |
| TRS5-45BLRU | 45°C ±2.5°C | 10°C | Break | 140 AC | 0.500 AC | 50.0 AC | 1 mA/5 VDC | 150 | 8.5 | UL & CSA |
| TRS5-50BLRU | 50°C ±2.5°C | 10°C | Break | 140 AC | 0.500 AC | 50.0 AC | 1 mA/5 VDC | 150 | 8.5 | UL & CSA |
| TRS5-55BLRU | 55°C ±2.5°C | 10°C | Break | 140 AC | 0.500 AC | 50.0 AC | 1 mA/5 VDC | 150 | 8.5 | UL & CSA |
| TRS5-60BLRU | 60°C ±2.5°C | 10°C | Break | 140 AC | 0.500 AC | 50.0 AC | 1 mA/5 VDC | 150 | 8.5 | UL & CSA |
| TRS5-65BLRU | 65°C ±2.5°C | 10°C | Break | 140 AC | 0.500 AC | 50.0 AC | 1 mA/5 VDC | 150 | 8.5 | UL & CSA |
| TRS5-70BLRU | 70°C ±2.5°C | 10°C | Break | 140 AC | 0.500 AC | 50.0 AC | 1 mA/5 VDC | 150 | 8.5 | UL & CSA |
| TRS5-75BLRU | 75°C ±2.5°C | 10°C | Break | 140 AC | 0.500 AC | 50.0 AC | 1 mA/5 VDC | 150 | 8.5 | UL & CSA |
| TRS5-80BLRU | 80°C ±2.5°C | 10°C | Break | 140 AC | 0.500 AC | 50.0 AC | 1 mA/5 VDC | 150 | 8.5 | UL & CSA |
| TRS5-85BLRU | 85°C ±2.5°C | 10°C | Break | 140 AC | 0.500 AC | 50.0 AC | 1 mA/5 VDC | 150 | 8.5 | UL & CSA |
| TRS5-90BLRU | 90°C ±2.5°C | 10°C | Break | 140 AC | 0.500 AC | 50.0 AC | 1 mA/5 VDC | 150 | 8.5 | UL & CSA |
| TRS5-95BLRU | 95°C ±2.5°C | 10°C | Break | 140 AC | 0.500 AC | 50.0 AC | 1 mA/5 VDC | 150 | 8.5 | UL & CSA |
| TRS5-100BLRU | 100°C ±2.5°C | 10°C | Break | 140 AC | 0.500 AC | 50.0 AC | 1 mA/5 VDC | 150 | 8.5 | UL & CSA |
| TRS5-105BLRU | 105°C ±2.5°C | 10°C | Break | 140 AC | 0.500 AC | 50.0 AC | 1 mA/5 VDC | 150 | 8.5 | UL & CSA |
| TRS5-110BLRU | 110°C ±2.5°C | 10°C | Break | 140 AC | 0.500 AC | 50.0 AC | 1 mA/5 VDC | 150 | 8.5 | UL & CSA |
| TRS5-115BLRU | 115°C ±2.5°C | 10°C | Break | 140 AC | 0.500 AC | 50.0 AC | 1 mA/5 VDC | 150 | 8.5 | UL & CSA |
| TRS5-120BLRU | 120°C ±2.5°C | 10°C | Break | 140 AC | 0.500 AC | 50.0 AC | 1 mA/5 VDC | 150 | 8.5 | UL & CSA |
| TRS5-125BLRU | 125°C ±2.5°C | 10°C | Break | 140 AC | 0.500 AC | 50.0 AC | 1 mA/5 VDC | 150 | 8.5 | UL & CSA |
| TRS5-130BLRU | 130°C ±2.5°C | 10°C | Break | 140 AC | 0.500 AC | 50.0 AC | 1 mA/5 VDC | 150 | 8.5 | UL |
| TRS5-0BLRVU | 0°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 8.5 | UL |
| TRS5-5BLRVU | 5°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 8.5 | UL |
| TRS5-10BLRVU | 10°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 8.5 | UL |
| TRS5-15BLRVU | 15°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 8.5 | UL |
| TRS5-20BLRVU | 20°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 8.5 | UL |
| TRS5-25BLRVU | 25°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 8.5 | UL |
| TRS5-30BLRVU | 30°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 8.5 | UL |
| TRS5-35BLRVU | 35°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 8.5 | UL |
| TRS5-40BLRVU | 40°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 8.5 | UL |
| TRS5-45BLRVU | 45°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 8.5 | UL |
| TRS5-50BLRVU | 50°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 8.5 | UL |
| TRS5-55BLRVU | 55°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 8.5 | UL |
| TRS5-60BLRVU | 60°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 8.5 | UL |
| TRS5-65BLRVU | 65°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 8.5 | UL |
| TRS5-70BLRVU | 70°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 8.5 | UL |

Table 1 – Ratings & Part Number Reference cont.

| Part Number | Switching Temperature (°C) | Maximum Differential Temperature (°C) | Contact Type | Maximum Opening/Closing Voltage (V) | Maximum Opening/Closing Current (A) | Maximum Opening/Closing Power (W) | Minimum Opening/Closing Current | Maximum Contact Resistance (mΩ) | Weight (g) | Approval |
|-----------------|----------------------------|---------------------------------------|--------------|-------------------------------------|-------------------------------------|-----------------------------------|---------------------------------|---------------------------------|------------|----------|
| TRS5-75BLRVU | 75°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 8.5 | UL |
| TRS5-80BLRVU | 80°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 8.5 | UL |
| TRS5-85BLRVU | 85°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 8.5 | UL |
| TRS5-90BLRVU | 90°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 8.5 | UL |
| TRS5-95BLRVU | 95°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 8.5 | UL |
| TRS5-100BLRVU | 100°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 8.5 | UL |
| TRS5-105BLRVU | 105°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 8.5 | UL |
| TRS5-110BLRVU | 110°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 8.5 | UL |
| TRS5-115BLRVU | 115°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 8.5 | UL |
| TRS5-120BLRVU | 120°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 8.5 | UL |
| TRS5-125BLRVU | 125°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 8.5 | UL |
| TRS5-130BLRVU | 130°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 150 | 8.5 | UL |
| TRS5-M10BSR01E | -10°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 300 | 6.6 | - |
| TRS5-0BSR01E | 0°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 300 | 6.6 | - |
| TRS5-10BSR01E | 10°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 300 | 6.6 | - |
| TRS5-20BSR01E | 20°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 300 | 6.6 | - |
| TRS5-30BSR01E | 30°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 300 | 6.6 | - |
| TRS5-40BSR01E | 40°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 300 | 6.6 | - |
| TRS5-50BSR01E | 50°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 300 | 6.6 | - |
| TRS5-60BSR01E | 60°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 300 | 6.6 | - |
| TRS5-70BSR01E | 70°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 300 | 6.6 | - |
| TRS5-80BSR01E | 80°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 300 | 6.6 | - |
| TRS5-90BSR01E | 90°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 300 | 6.6 | - |
| TRS5-100BSR01E | 100°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 300 | 6.6 | - |
| TRS5-M10BSR01EV | -10°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 300 | 6.6 | - |
| TRS5-0BSR01EV | 0°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 300 | 6.6 | - |
| TRS5-10BSR01EV | 10°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 300 | 6.6 | - |
| TRS5-20BSR01EV | 20°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 300 | 6.6 | - |
| TRS5-30BSR01EV | 30°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 300 | 6.6 | - |
| TRS5-40BSR01EV | 40°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 300 | 6.6 | - |
| TRS5-50BSR01EV | 50°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 300 | 6.6 | - |
| TRS5-60BSR01EV | 60°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 300 | 6.6 | - |
| TRS5-70BSR01EV | 70°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 300 | 6.6 | - |
| TRS5-80BSR01EV | 80°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 300 | 6.6 | - |
| TRS5-90BSR01EV | 90°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 300 | 6.6 | - |
| TRS5-100BSR01EV | 100°C ±2.5°C | 10°C | Break | 264 AC | 0.275 AC | 60.5 AC | 1 mA/5 VDC | 300 | 6.6 | - |
| M-TRS5-M10B | -10°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 4.1 | - |
| M-TRS5-0B | 0°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 4.1 | - |
| M-TRS5-10B | 10°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 4.1 | - |
| M-TRS5-20B | 20°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 4.1 | - |
| M-TRS5-30B | 30°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 4.1 | - |

Table 1 – Ratings & Part Number Reference cont.

| Part Number | Switching Temperature (°C) | Maximum Differential Temperature (°C) | Contact Type | Maximum Opening/Closing Voltage (V) | Maximum Opening/Closing Current (A) | Maximum Opening/Closing Power (W) | Minimum Opening/Closing Current | Maximum Contact Resistance (mΩ) | Weight (g) | Approval |
|-------------|----------------------------|---------------------------------------|--------------|-------------------------------------|-------------------------------------|-----------------------------------|---------------------------------|---------------------------------|------------|----------|
| M-TRS5-40B | 40°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 4.1 | - |
| M-TRS5-50B | 50°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 4.1 | - |
| M-TRS5-60B | 60°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 4.1 | - |
| M-TRS5-70B | 70°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 4.1 | - |
| M-TRS5-80B | 80°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 4.1 | - |
| M-TRS5-90B | 90°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 4.1 | - |
| M-TRS5-100B | 100°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 4.1 | - |
| M-TRS5-110B | 110°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 4.1 | - |
| M-TRS5-120B | 120°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 4.1 | - |
| M-TRS5-130B | 130°C ±2.5°C | 10°C | Break | 140 AC/200 DC | 0.550 AC/DC | 60.5 AC/10.0 DC | 1 mA/5 VDC | 150 | 4.1 | - |

Table 2 – Ratings & Part Number Reference

| Part Type | Packaging Type | Pieces per Tray | Pieces per Box |
|-----------|----------------|-----------------|----------------|
| LR00 | Rubber Band | 50 | 500 |
| CR00 | | | 600 |
| LRU | | | |
| LRVU | | | |
| SR01E | Tray | 25 | 500 |
| CR01 | | 30 | 600 |
| M-TRS | | 50 | 1,000 |

Handling Precautions

Precautions to be taken when using Thermal Reed Switches

(Please read these precautions before using our products)

- Do NOT use in close proximity to strong magnetic parts.
- Do NOT use product under mechanical weight load.
- Do NOT use if dropped or severely shocked.
- Do NOT use with a greater load than specified.
- Avoid stress (especially torsion) in case of additional processing.
- Thermal Reed Switches have a specific resonance frequency. Please contact a KEMET representative if an oscillation is added.

Export Control

For customers in Japan

For products which are controlled items subject to the "Foreign Exchange and Foreign Trade Law" of Japan, the export license specified by the law is required for export.

For customers outside Japan

Thermal Sensors should not be used or sold for use in the development, production, stockpiling or utilization of any conventional weapons or mass-destructive weapons (nuclear weapons, chemical or biological weapons, or missiles), or any other weapons.

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Although all product-related warnings, cautions and notes must be observed, the customer should not assume that all safety measures are indicated or that other measures may not be required.

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