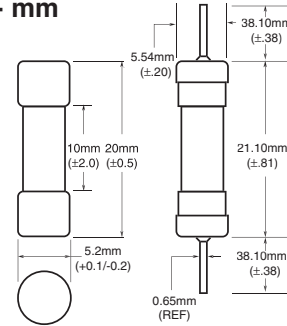


5 x 20mm Fast-acting Glass Tube Fuses GMA Series



Dimensions - mm



Description

- Fast-acting, low breaking capacity
- Optional axial leads available
- 5 x 20mm physical size
- Glass tube, silver-plated (63mA-315mA) and nickel-plated (500mA-15A) brass endcap construction
- Designed to UL/CSA 248-14

- Ratings above 6.3A have a 0.8mm diameter lead
- With TR2 packaging code, lead wire length is 19.05mm

Agency Information

- UL Listed, Guide JDYX, File E19180, 63mA-6A
- UL Recognized, Guide JDYX2, File E19180, 7-15A
- CSA Certified, Class 1422-01, File 53787, 63mA-6A
- PSE Approval, 1A-15A

| Electrical Characteristics | | |
|----------------------------|-----------------|--------------------|
| Rated Current | % of Amp Rating | Opening Time |
| 63mA - 15A | 100% | None |
| | 135% | 60 minutes maximum |
| | 200% | 2 minutes maximum |

Ordering

- Specify packaging, product, and option code

Specifications

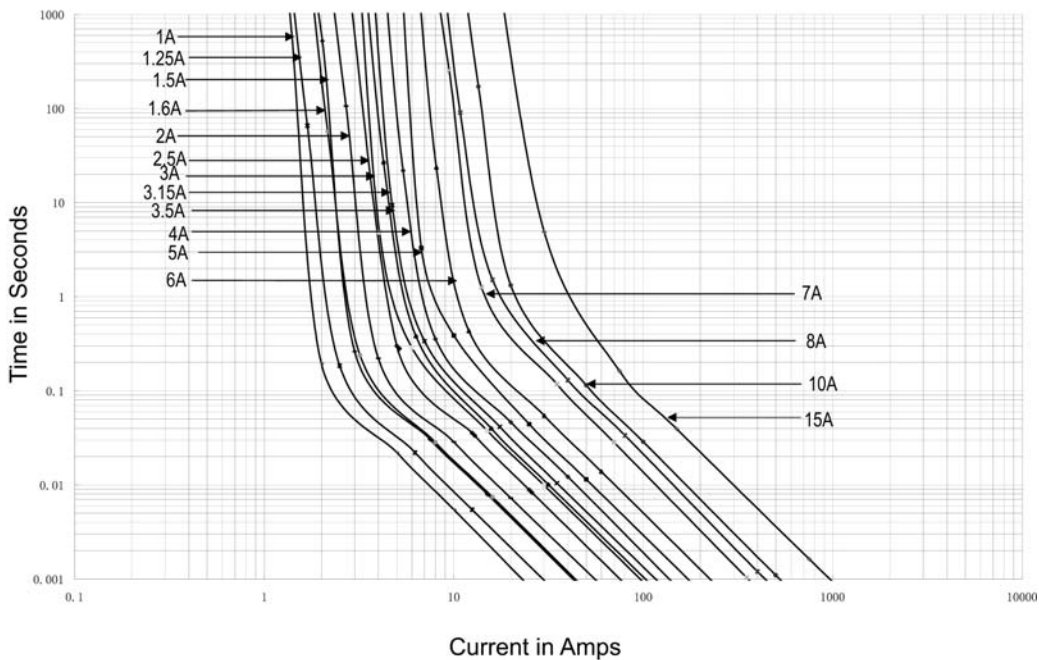
| Product Code | Amp Rating | Voltage Rating Vac | Interrupting Rating (amps)* | | Typical DC Cold Resistance (Ω)** | Typical Pre-Arc I [†] t Vac† | Maximum Voltage Drop (mV)‡ |
|--------------|------------|--------------------|-----------------------------|--------|----------------------------------|---------------------------------------|----------------------------|
| | | | 250Vac | 125Vac | | | |
| GMA-63-R | 63mA | 250 | 35 | 10,000 | 15.750 | 0.00024 | 4700 |
| GMA-100-R | 100mA | 250 | 35 | 10,000 | 7.840 | 0.0001 | 4300 |
| GMA-125-R | 125mA | 250 | 35 | 10,000 | 4.895 | 0.0024 | 2600 |
| GMA-200-R | 200mA | 250 | 35 | 10,000 | 2.500 | 0.001 | 3400 |
| GMA-250-R | 250mA | 250 | 35 | 10,000 | 1.735 | 0.018 | 2200 |
| GMA-300-R | 300mA | 250 | 35 | 10,000 | 0.906 | 0.019 | 470 |
| GMA-315-R | 315mA | 250 | 35 | 10,000 | 0.839 | 0.019 | 450 |
| GMA-500-R | 500mA | 250 | 35 | 10,000 | 0.454 | 0.15 | 230 |
| GMA-600-R | 600mA | 250 | 35 | 10,000 | 0.256 | 0.32 | 200 |
| GMA-750-R | 750mA | 250 | 35 | 10,000 | 0.186 | 0.47 | 200 |
| GMA-800-R | 800mA | 250 | 35 | 10,000 | 0.170 | 0.70 | 180 |
| GMA-1-R | 1 | 250 | 35 | 10,000 | 0.163 | 0.48 | 300 |
| GMA-1.25-R | 1.25 | 250 | 100 | 10,000 | 0.122 | 0.84 | 290 |
| GMA-1.5-R | 1.5 | 250 | 100 | 10,000 | 0.090 | 1.6 | 270 |
| GMA-1.6-R | 1.6 | 250 | 100 | 10,000 | 0.080 | 2.0 | 260 |
| GMA-2-R | 2 | 250 | 100 | 10,000 | 0.066 | 3.1 | 250 |
| GMA-2.5-R | 2.5 | 250 | 100 | 10,000 | 0.046 | 4.9 | 240 |
| GMA-3-R | 3 | 250 | 100 | 10,000 | 0.039 | 8.8 | 215 |
| GMA-3.15-R | 3.15 | 125 | - | 10,000 | 0.036 | 9.7 | 210 |
| GMA-3.5-R | 3.5 | 125 | - | 10,000 | 0.030 | 13 | 210 |
| GMA-4-R | 4 | 125 | - | 10,000 | 0.026 | 19 | 205 |
| GMA-5-R | 5 | 125 | - | 10,000 | 0.021 | 29 | 200 |
| GMA-6-R | 6 | 125 | - | 10,000 | 0.017 | 45 | 180 |
| GMA-7-R | 7 | 125 | - | 200 | 0.012 | 150 | 110 |
| GMA-8-R | 8 | 125 | - | 200 | 0.009 | 280 | 110 |
| GMA-10-R | 10 | 125 | - | 200 | 0.006 | 280 | 110 |
| GMA-15-R | 15 | 125 | - | 150 | 0.004 | 950 | 100 |

* Interrupting ratings: Interrupting ratings for 63mA - 6A were measured at 70% - 80% power factor on AC. The interrupting ratings for 7A - 15A were measured at 100% power factor on AC.
 ** DC Cold Resistance (Measured at <10% of rated current)
 † Typical Pre-Arching I[†]t (I[†]t was measured at listed interrupting rating and rated voltage)
 ‡ Maximum Voltage drop (Voltage drop was measured at 20°C ambient temperature at rated current)

Time-Current Curve – GMA-R 63mA-800mA



Time-Current Curve – GMA-R 1-15A



Packaging Code

| Packaging Code | Description |
|----------------|--|
| BK | 100 fuses packed into a cardboard carton |
| BK1 | 1000 fuses packed into a poly bag |
| TR2 | 1500 fuses packed into tape on a reel (19.05mm lead wire length) |

Option Code

| Option Code | Description |
|-------------|--|
| V | Axial leads - copper tinned wire with nickel-plated brass overcaps |

5 x 20mm Fast-acting Glass Tube Fuses GMA Series



Dimensions - mm



Description

- Fast-acting, low breaking capacity
- Optional axial leads available
- 5 x 20mm physical size
- Glass tube, silver-plated (63mA-315mA) and nickel-plated (500mA-15A) brass endcap construction
- Designed to UL/CSA 248-14

- Ratings above 6.3A have a 0.8mm diameter lead
- With TR2 packaging code, lead wire length is 19.05mm

Agency Information

- UL Listed, Guide JDYX, File E19180, 63mA-6A
- UL Recognized, Guide JDYX2, File E19180, 7-15A
- CSA Certified, Class 1422-01, File 53787, 63mA-6A
- PSE Approval, 1A-15A

| Electrical Characteristics | | |
|----------------------------|-----------------|--------------------|
| Rated Current | % of Amp Rating | Opening Time |
| 63mA - 15A | 100% | None |
| | 135% | 60 minutes maximum |
| | 200% | 2 minutes maximum |

Ordering

- Specify packaging, product, and option code

Specifications

| Product Code | Amp Rating | Voltage Rating Vac | Interrupting Rating (amps)* | | Typical DC Cold Resistance (Ω)** | Typical Pre-Arc I [†] t Vac† | Maximum Voltage Drop (mV)‡ |
|--------------|------------|--------------------|-----------------------------|--------|----------------------------------|---------------------------------------|----------------------------|
| | | | 250Vac | 125Vac | | | |
| GMA-63-R | 63mA | 250 | 35 | 10,000 | 15.750 | 0.00024 | 4700 |
| GMA-100-R | 100mA | 250 | 35 | 10,000 | 7.840 | 0.0001 | 4300 |
| GMA-125-R | 125mA | 250 | 35 | 10,000 | 4.895 | 0.0024 | 2600 |
| GMA-200-R | 200mA | 250 | 35 | 10,000 | 2.500 | 0.001 | 3400 |
| GMA-250-R | 250mA | 250 | 35 | 10,000 | 1.735 | 0.018 | 2200 |
| GMA-300-R | 300mA | 250 | 35 | 10,000 | 0.906 | 0.019 | 470 |
| GMA-315-R | 315mA | 250 | 35 | 10,000 | 0.839 | 0.019 | 450 |
| GMA-500-R | 500mA | 250 | 35 | 10,000 | 0.454 | 0.15 | 230 |
| GMA-600-R | 600mA | 250 | 35 | 10,000 | 0.256 | 0.32 | 200 |
| GMA-750-R | 750mA | 250 | 35 | 10,000 | 0.186 | 0.47 | 200 |
| GMA-800-R | 800mA | 250 | 35 | 10,000 | 0.170 | 0.70 | 180 |
| GMA-1-R | 1 | 250 | 35 | 10,000 | 0.163 | 0.48 | 300 |
| GMA-1.25-R | 1.25 | 250 | 100 | 10,000 | 0.122 | 0.84 | 290 |
| GMA-1.5-R | 1.5 | 250 | 100 | 10,000 | 0.090 | 1.6 | 270 |
| GMA-1.6-R | 1.6 | 250 | 100 | 10,000 | 0.080 | 2.0 | 260 |
| GMA-2-R | 2 | 250 | 100 | 10,000 | 0.066 | 3.1 | 250 |
| GMA-2.5-R | 2.5 | 250 | 100 | 10,000 | 0.046 | 4.9 | 240 |
| GMA-3-R | 3 | 250 | 100 | 10,000 | 0.039 | 8.8 | 215 |
| GMA-3.15-R | 3.15 | 125 | - | 10,000 | 0.036 | 9.7 | 210 |
| GMA-3.5-R | 3.5 | 125 | - | 10,000 | 0.030 | 13 | 210 |
| GMA-4-R | 4 | 125 | - | 10,000 | 0.026 | 19 | 205 |
| GMA-5-R | 5 | 125 | - | 10,000 | 0.021 | 29 | 200 |
| GMA-6-R | 6 | 125 | - | 10,000 | 0.017 | 45 | 180 |
| GMA-7-R | 7 | 125 | - | 200 | 0.012 | 150 | 110 |
| GMA-8-R | 8 | 125 | - | 200 | 0.009 | 280 | 110 |
| GMA-10-R | 10 | 125 | - | 200 | 0.006 | 280 | 110 |
| GMA-15-R | 15 | 125 | - | 150 | 0.004 | 950 | 100 |

* Interrupting ratings: Interrupting ratings for 63mA - 6A were measured at 70% - 80% power factor on AC. The interrupting ratings for 7A - 15A were measured at 100% power factor on AC.

** DC Cold Resistance (Measured at <10% of rated current)

† Typical Pre-Arching I[†]t (I[†]t was measured at listed interrupting rating and rated voltage)

‡ Maximum Voltage drop (Voltage drop was measured at 20°C ambient temperature at rated current)

Time-Current Curve – GMA-R 63mA-800mA



Time-Current Curve – GMA-R 1-15A



Packaging Code

| Packaging Code | Description |
|----------------|--|
| BK | 100 fuses packed into a cardboard carton |
| BK1 | 1000 fuses packed into a poly bag |
| TR2 | 1500 fuses packed into tape on a reel (19.05mm lead wire length) |

Option Code

| Option Code | Description |
|-------------|--|
| V | Axial leads - copper tinned wire with nickel-plated brass overcaps |