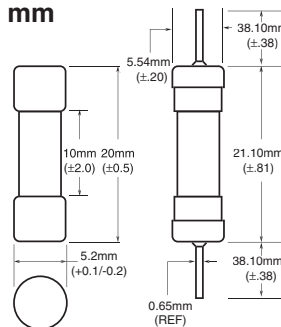


# 5 x 20mm Fast-acting Glass Tube Fuses GMA Series



## 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

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

## 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

## 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 <sup>†</sup> 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                        |

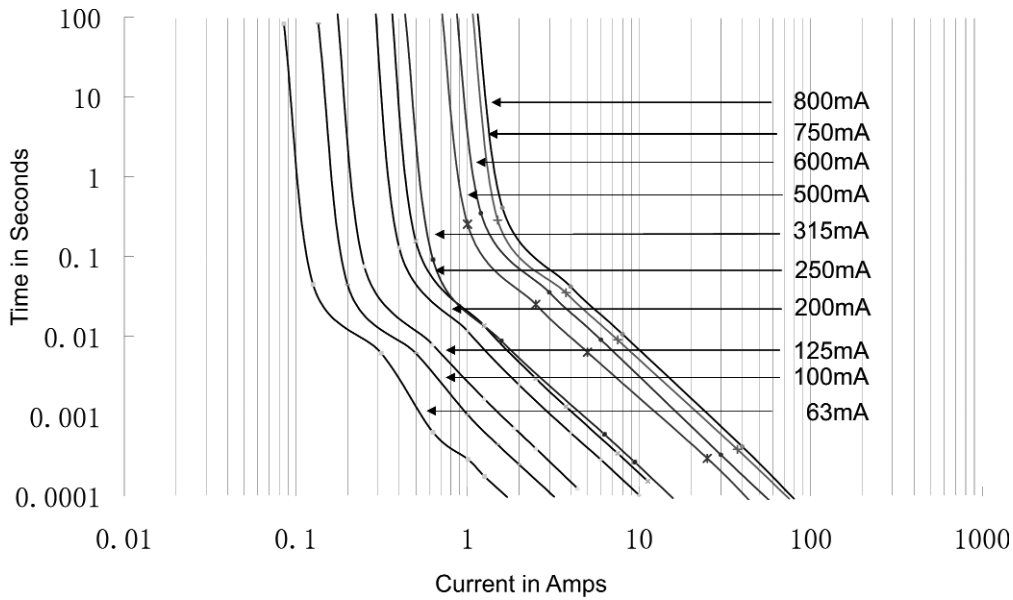
\* Interrupting ratings: Interrupting ratings for 63mA - 6A were measured at 70% - 80% power factor on AC. The interrupting ratings for 7A - 15A were measured at 100% power factor on AC.

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

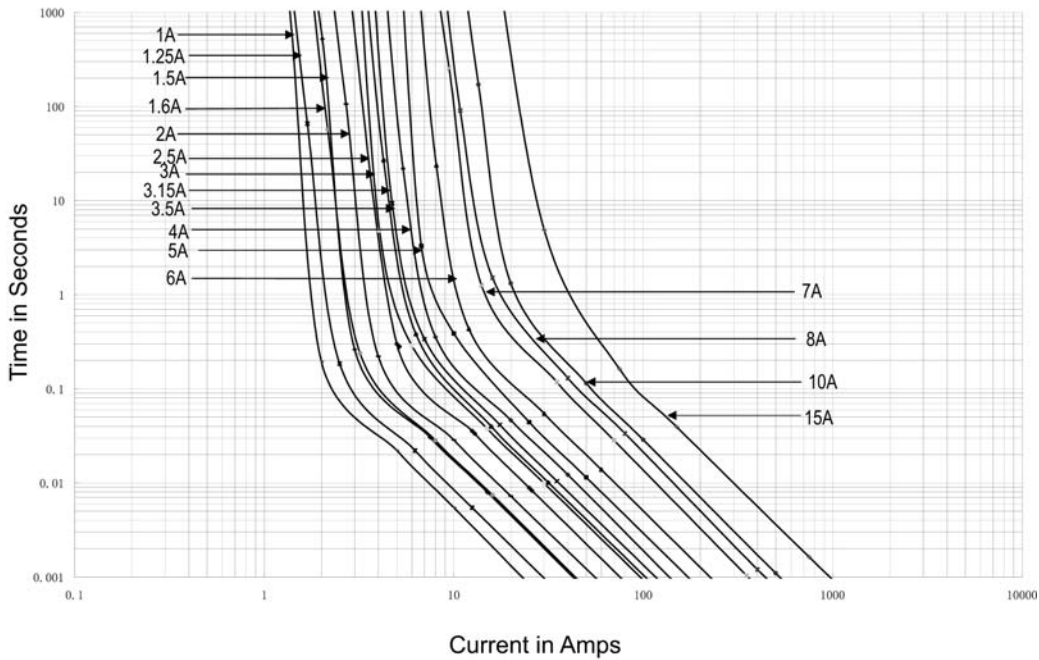
† Typical Pre-Arching I<sup>†</sup>t (I<sup>†</sup>t was measured at listed interrupting rating and rated voltage)

‡ 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) |

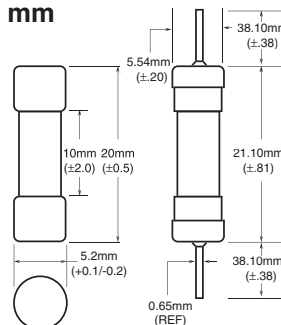
#### Option Code

| 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 <sup>†</sup> 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                       |
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| 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                        |
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| GMA-800-R    | 800mA      | 250                | 35                          | 10,000 | 0.170                            | 0.70                                  | 180                        |
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| 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                        |
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| 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                        |

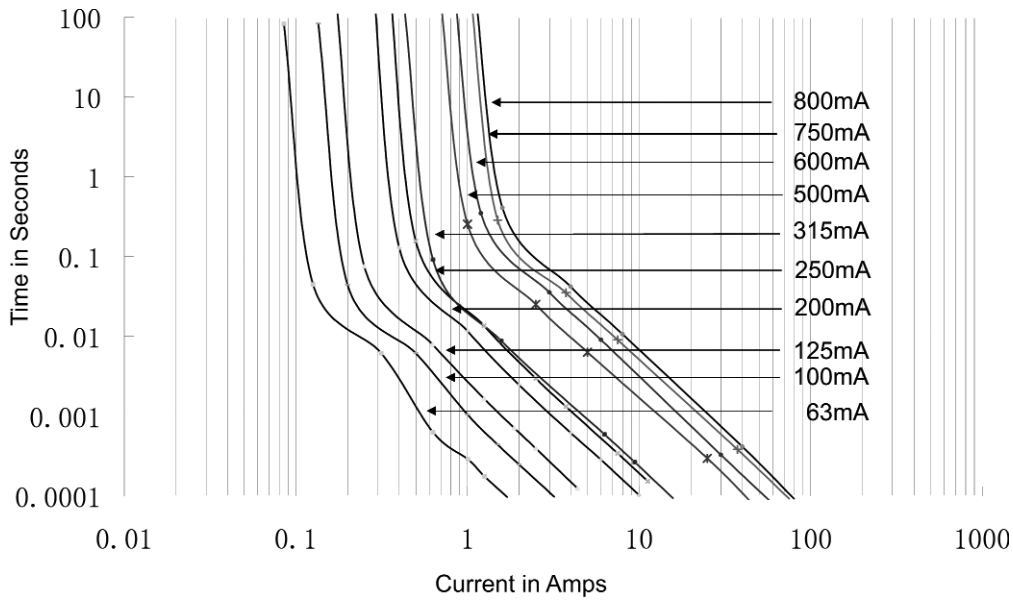
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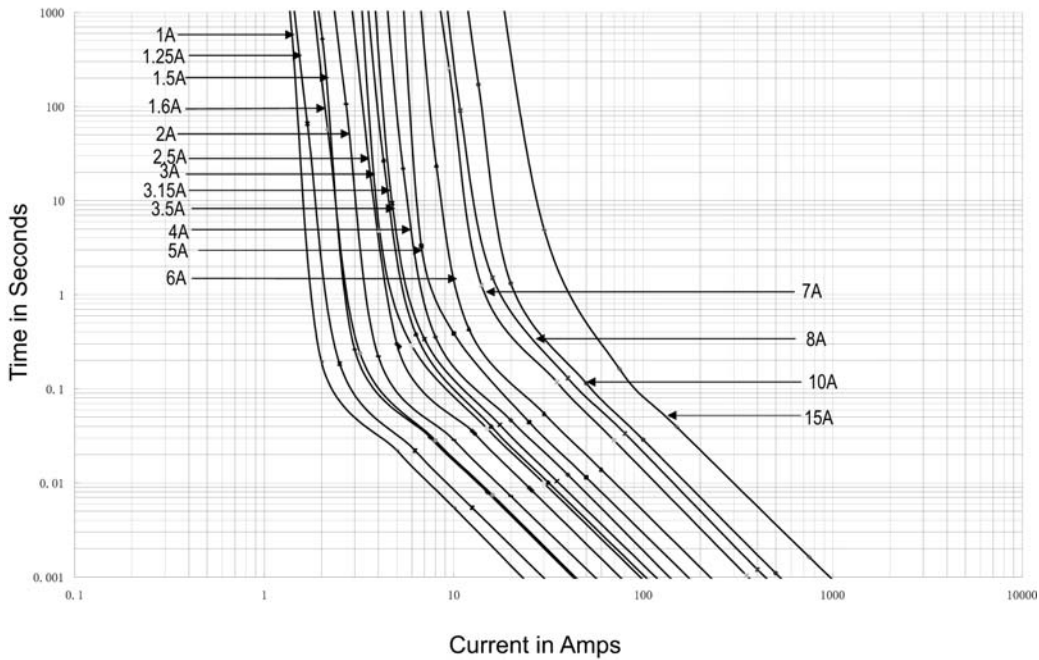
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### Time-Current Curve – GMA-R 63mA-800mA



### Time-Current Curve – GMA-R 1-15A



#### Packaging Code

| Packaging Code | Description  |
|----------------|--|
| BK             | 100 fuses packed into a cardboard carton                         |
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#### Option Code

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