

# GMA

## 5 mm x 20 mm Fast-acting glass tube fuses



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

### Product features

- 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

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

Product Code	Amp Rating	Voltage Rating Vac	Interrupting Rating (amps)*		Typical DC Cold Resistance (Ω)**	Typical Pre-Arc I <sup>2</sup> t Vac†	Maximum Voltage Drop (mV)‡
			250Vac	125Vac			
			GMA-63-R	63mA			
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)

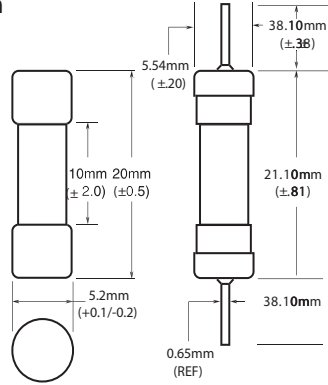
† Typical Pre-Arching I<sup>2</sup>t (I<sup>2</sup>t was measured at listed interrupting rating and rated voltage)

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

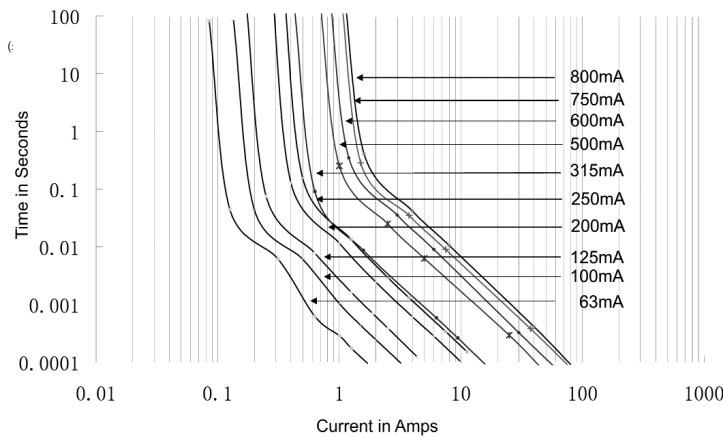


Powering Business Worldwide

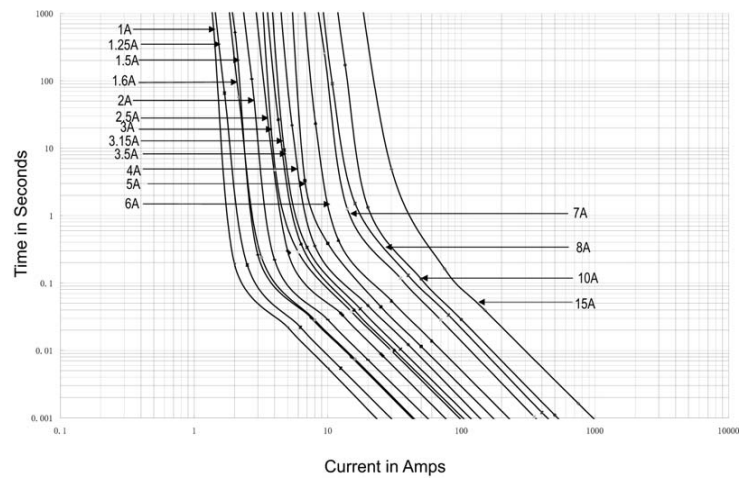
**Dimensions - mm**



**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

Life Support Policy: Eaton does not authorize the use of any of its products for use in life support devices or systems without the express written approval of an officer of the Company. Life support systems are devices which support or sustain life, and whose failure to perform, when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in significant injury to the user.

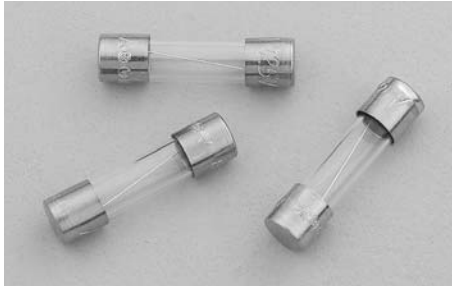
Eaton reserves the right, without notice, to change design or construction of any products and to discontinue or limit distribution of any products. Eaton also reserves the right to change or update, without notice, any technical information contained in this bulletin.

**Eaton**  
Electronics Division  
1000 Eaton Boulevard  
Cleveland, OH 44122  
United States  
www.eaton.com/electronics

© 2017 Eaton  
All Rights Reserved  
Printed in USA  
Publication No. 2017 BU-SB091174  
May 2017

# GMA

## 5 mm x 20 mm Fast-acting glass tube fuses



### Product features

- 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

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

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

Product Code	Amp Rating	Voltage Rating Vac	Interrupting Rating (amps)*		Typical DC Cold Resistance (Ω)**	Typical Pre-Arc I <sup>2</sup> t <sup>†</sup>	Maximum Voltage Drop (mV)‡
			250Vac	125Vac			
			GMA-63-R	63mA			
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)

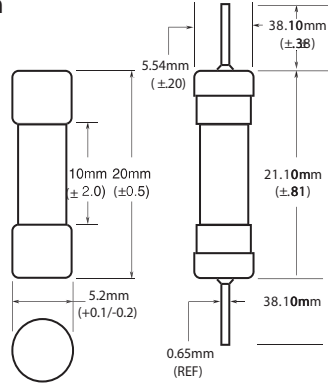
† Typical Pre-Arching I<sup>2</sup>t (I<sup>2</sup>t was measured at listed interrupting rating and rated voltage)

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

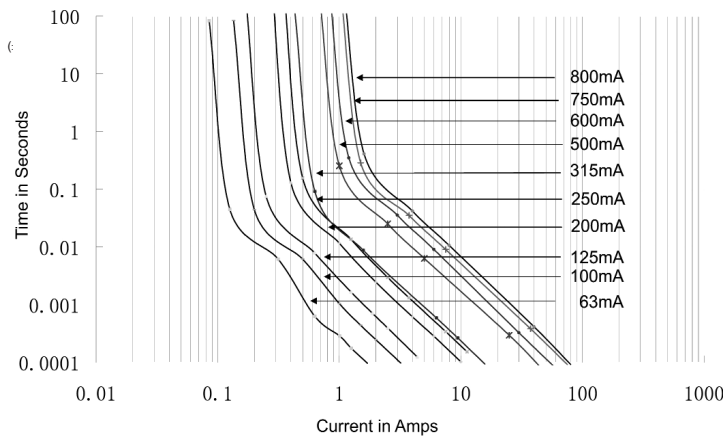


Powering Business Worldwide

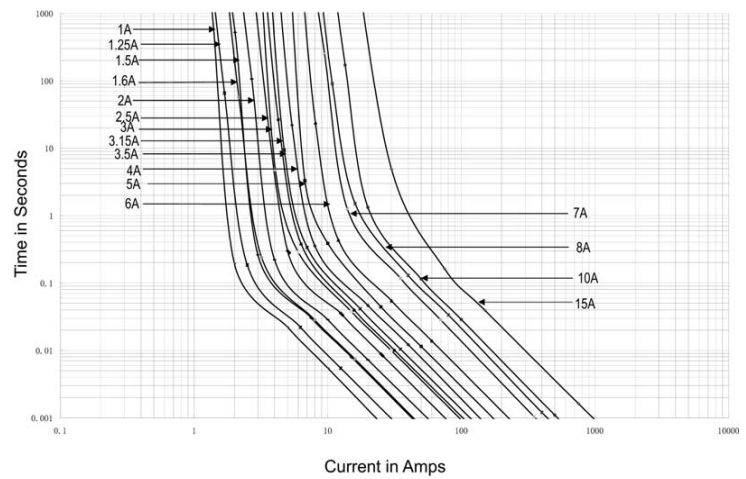
**Dimensions - mm**



**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

Life Support Policy: Eaton does not authorize the use of any of its products for use in life support devices or systems without the express written approval of an officer of the Company. Life support systems are devices which support or sustain life, and whose failure to perform, when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in significant injury to the user.

Eaton reserves the right, without notice, to change design or construction of any products and to discontinue or limit distribution of any products. Eaton also reserves the right to change or update, without notice, any technical information contained in this bulletin.

**Eaton**  
**Electronics Division**  
 1000 Eaton Boulevard  
 Cleveland, OH 44122  
 United States  
[www.eaton.com/electronics](http://www.eaton.com/electronics)

© 2017 Eaton  
 All Rights Reserved  
 Printed in USA  
 Publication No. 2017 BU-SB091174  
 May 2017

Eaton is a registered trademark.

All other trademarks are property of their respective owners.