

5 x 20mm Fuses

GDB Series, Fast-Acting, Glass Tube

Description

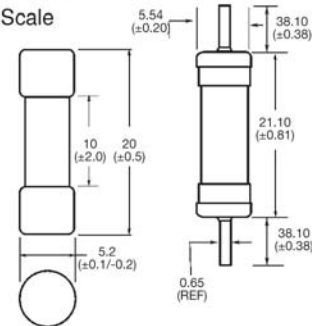
- Fast-acting, low breaking capacity
- 5 x 20mm physical size
- Glass tube, nickel-plated brass endcap construction
- Optional axial leads are .032" x 1.5" copper tinned
- Designed to IEC 60127-2 (32mA-10A)



I _n	1.5 I _n		2.1 I _n		2.75 I _n		4 I _n		10 I _n
	min	max	min	max	min	max	min	max	max
32mA-100mA	60 min	30 min	10 ms	500 ms	3 ms	100 ms	20 ms		
125mA-6.3A	60 min	30 min	50 ms	2 sec	10 ms	300 ms	20 ms		
8A-10A	30 min	30 min	50 ms	2 sec	10 ms	400 ms	40 ms		

Dimensions - mm

Drawing Not to Scale



Agency Information

- UL Recognized Card: Guide JDYX2, File E19180
- VDE Approval: File 40014109

Ordering

Specify product code

- Insert packaging code prefix before part number. E.g. BK/GDB-250mA
- Ratings above 6.3A have a 0.8mm diameter lead
- With TR2 packaging code, lead wire length is 19.05mm

Specify product code

- For axial leads, insert "V" between catalog series and amp rating. E.g. BK/GDB-V-250mA

Specifications

Part Number	Voltage Rating Vac	Interrupting Rating (amps) at Rated Voltage (50Hz) Vac	Typical DC Cold Resistance (Ω)*	Typical Melting I [†] t AC†	Maximum Voltage Drop (mV)‡	Agency Approval	
						UR	VDE
GDB-32mA	250	35	40	0.000047	3200		
GDB-40mA	250	35	25	0.00011	2500		
GDB-50mA	250	35	17	0.00020	2400		
GDB-63mA	250	35	12.5	0.00057	2000		
GDB-80mA	250	35	5.0	0.0012	1200		
GDB-100mA	250	35	3.8	0.003	1100		
GDB-125mA	250	35	2.8	0.005	1000		
GDB-160mA	250	35	9.1	0.008	2000	X	X
GDB-200mA	250	35	6.8	0.016	1700	X	X
GDB-250mA	250	35	4.3	0.28	1400	X	X
GDB-315mA	250	35	3.1	0.58	1300	X	X
GDB-400mA	250	35	2.0	0.18	1100	X	X
GDB-500mA	250	35	0.26	0.18	220	X	X
GDB-630mA	250	35	0.20	0.35	220	X	X
GDB-800mA	250	35	0.14	0.67	190	X	X
GDB-1A	250	35	0.125	0.60	200	X	X
GDB-1.25A	250	35	0.096	0.84	200	X	X
GDB-1.6A	250	35	0.066	1.6	190	X	X
GDB-2A	250	35	0.043	4.2	150	X	X
GDB-2.5A	250	35	0.034	6.1	150	X	X
GDB-3.15A	250	35	0.025	13	130	X	X
GDB-4A	250	40	0.021	22	130	X	X
GDB-5A	250	50	0.014	42	120	X	X
GDB-6.3A	250	63	0.010	69	120	X	X
GDB-8A	250	80	0.010	N/A	120	X	X
GDB-10A	250	100	0.008	N/A	120	X	X

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

† Typical Melting 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

Nominal Time-Current Characteristics



Packaging Code

Packaging Prefix	Description
BK	100 fuses packed into a cardboard carton
BK1	1,000 fuses packed into a poly bag
TR2	1,500 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 endcaps

The only controlled copy of this Data Sheet is the electronic read-only version located on the Cooper Bussmann Network Drive. All other copies of this document are by definition uncontrolled. This bulletin is intended to clearly present comprehensive product data and provide technical information that will help the end user with design applications. Cooper Bussmann reserves the right, without notice, to change design or construction of any products and to discontinue or limit distribution of any products. Cooper Bussmann also reserves the right to change or update, without notice, any technical information contained in this bulletin. Once a product has been selected, it should be tested by the user in all possible applications.

Life Support Policy: Cooper Bussmann 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.

© 2009 Cooper Bussmann
St. Louis, MO 63178
www.cooperbussmann.com



5 x 20mm Fuses

GDB Series, Fast-Acting, Glass Tube

Description

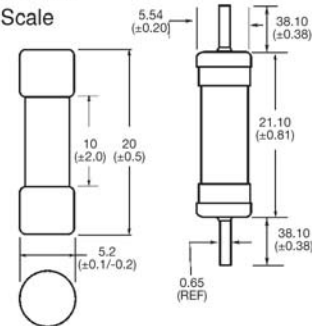
- Fast-acting, low breaking capacity
- 5 x 20mm physical size
- Glass tube, nickel-plated brass endcap construction
- Optional axial leads are .032" x 1.5" copper tinned
- Designed to IEC 60127-2 (32mA-10A)



I _n	1.5 I _n		2.1 I _n		2.75 I _n		4 I _n		10 I _n
	min	max	min	max	min	max	min	max	max
32mA-100mA	60 min	30 min	10 ms	500 ms	3 ms	100 ms	20 ms		
125mA-6.3A	60 min	30 min	50 ms	2 sec	10 ms	300 ms	20 ms		
8A-10A	30 min	30 min	50 ms	2 sec	10 ms	400 ms	40 ms		

Dimensions - mm

Drawing Not to Scale



Agency Information

- UL Recognized Card: Guide JDYX2, File E19180
- VDE Approval: File 40014109

Ordering

Specify product code

- Insert packaging code prefix before part number. E.g. BK/GDB-250mA
- Ratings above 6.3A have a 0.8mm diameter lead
- With TR2 packaging code, lead wire length is 19.05mm

Specify product code

- For axial leads, insert "V" between catalog series and amp rating. E.g. BK/GDB-V-250mA

Specifications

Part Number	Voltage Rating Vac	Interrupting Rating (amps) at Rated Voltage (50Hz) Vac	Typical DC Cold Resistance (Ω)*	Typical Melting I [†] t AC†	Maximum Voltage Drop (mV)‡	Agency Approval	
						UR	VDE
GDB-32mA	250	35	40	0.000047	3200		
GDB-40mA	250	35	25	0.00011	2500		
GDB-50mA	250	35	17	0.00020	2400		
GDB-63mA	250	35	12.5	0.00057	2000		
GDB-80mA	250	35	5.0	0.0012	1200		
GDB-100mA	250	35	3.8	0.003	1100		
GDB-125mA	250	35	2.8	0.005	1000		
GDB-160mA	250	35	9.1	0.008	2000	X	X
GDB-200mA	250	35	6.8	0.016	1700	X	X
GDB-250mA	250	35	4.3	0.28	1400	X	X
GDB-315mA	250	35	3.1	0.58	1300	X	X
GDB-400mA	250	35	2.0	0.18	1100	X	X
GDB-500mA	250	35	0.26	0.18	220	X	X
GDB-630mA	250	35	0.20	0.35	220	X	X
GDB-800mA	250	35	0.14	0.67	190	X	X
GDB-1A	250	35	0.125	0.60	200	X	X
GDB-1.25A	250	35	0.096	0.84	200	X	X
GDB-1.6A	250	35	0.066	1.6	190	X	X
GDB-2A	250	35	0.043	4.2	150	X	X
GDB-2.5A	250	35	0.034	6.1	150	X	X
GDB-3.15A	250	35	0.025	13	130	X	X
GDB-4A	250	40	0.021	22	130	X	X
GDB-5A	250	50	0.014	42	120	X	X
GDB-6.3A	250	63	0.010	69	120	X	X
GDB-8A	250	80	0.010	N/A	120	X	X
GDB-10A	250	100	0.008	N/A	120	X	X

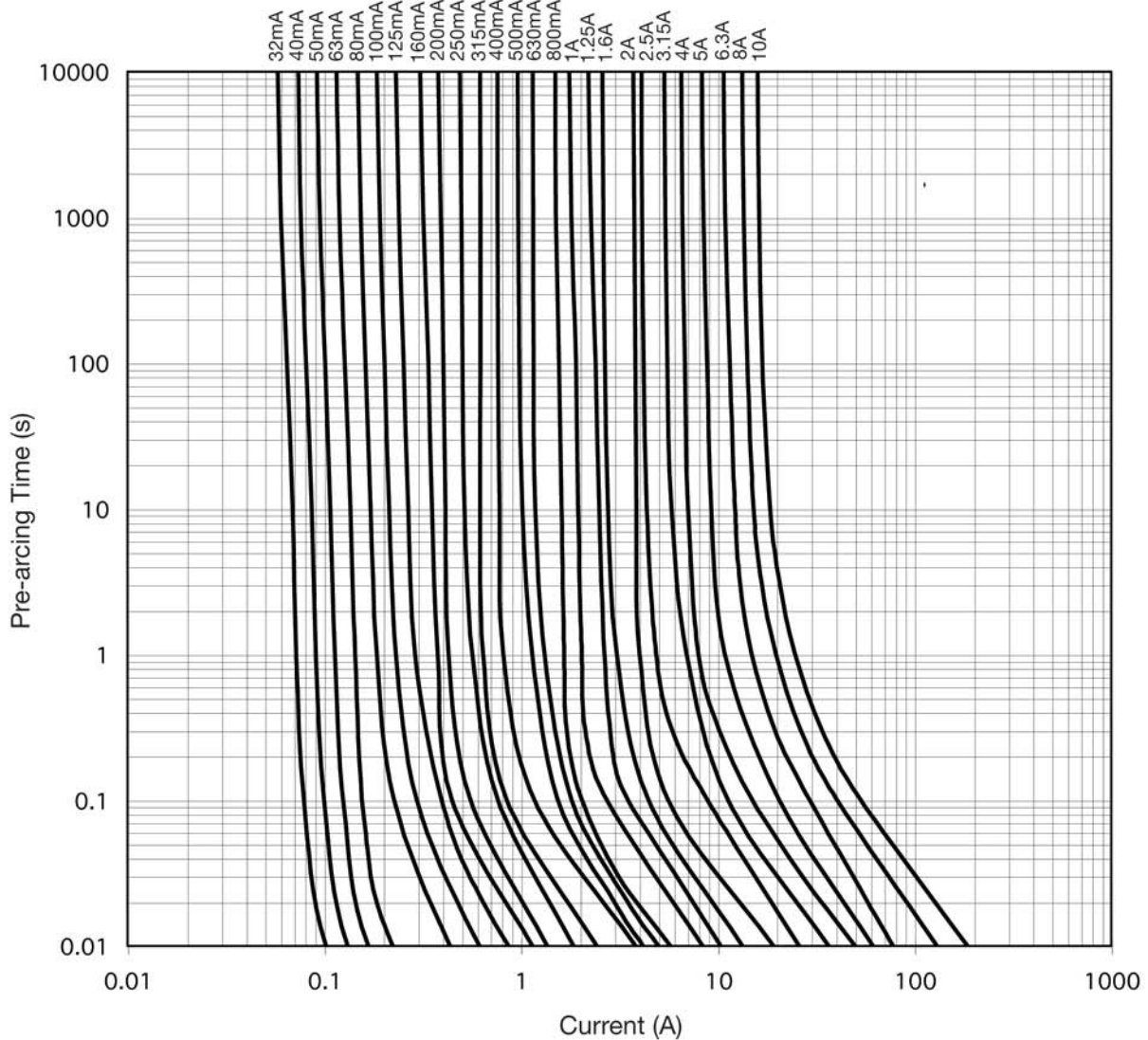
* DC Cold Resistance (Measured at <10% of rated current)

† Typical Melting 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

Nominal Time-Current Characteristics



Packaging Code

Packaging Prefix	Description
BK	100 fuses packed into a cardboard carton
BK1	1,000 fuses packed into a poly bag
TR2	1,500 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 endcaps

The only controlled copy of this Data Sheet is the electronic read-only version located on the Cooper Bussmann Network Drive. All other copies of this document are by definition uncontrolled. This bulletin is intended to clearly present comprehensive product data and provide technical information that will help the end user with design applications. Cooper Bussmann reserves the right, without notice, to change design or construction of any products and to discontinue or limit distribution of any products. Cooper Bussmann also reserves the right to change or update, without notice, any technical information contained in this bulletin. Once a product has been selected, it should be tested by the user in all possible applications.

Life Support Policy: Cooper Bussmann 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.

© 2009 Cooper Bussmann
St. Louis, MO 63178
www.cooperbussmann.com

