AGC

1/4" x 1-1/4" Fast-acting glass tube fuses

RoHS

Product features

- Fast-acting
- Optional axial leads available
- 1/4" x 1-1/4" (6.3 mm x 32 mm) physical size
- Glass tube, nickel-plated brass end cap construction
- UL Listed product meets standard 248-14

Applications

Primary circuit protection

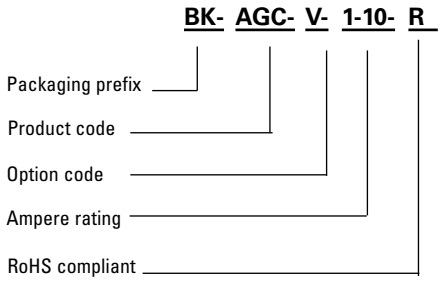
- Power supplies
- Battery chargers
- Monitors
- Consumer electronics
- Test equipment

Agency information

- UL Listed card: File E19180, Guide JDYX (AGC 1/10 A - 10 A)
- UL Recognition card: File E19180, Guide JDYX2 (AGC 11 A - 40 A)
- CSA Component acceptance card (Class No. 1422-30)
- CSA Certification acceptance card (Class No. 1422–01)

Ordering code

The ordering code is the part number replacing the "/" with a "-" plus adding the packaging prefix and option code.



Packaging prefix

- Blank (5 ferrule/cartridge parts in a 5 inch tin, 4 axial lead parts in a 5 inch tin)
- BK- (100 parts packed into a cardboard carton with flaps folded)

Option code

- -B- (Board washable - Hermetically sealed to withstand aqueous cleaning)
- -V- (Axial leads - copper tinned wire with nickel-plated brass end caps)

Electrical characteristics

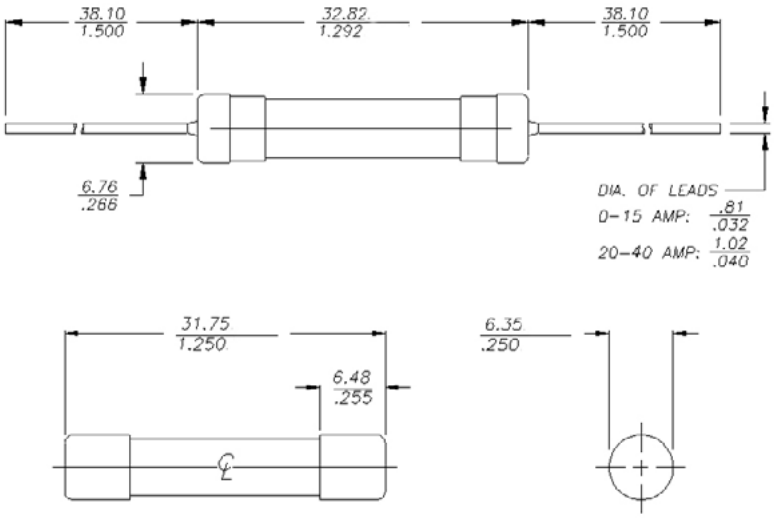
Amp Rating	% of Amp Rating	Opening Time
1/10 A – 40 A	100%	4 hours minimum
1/10 A – 40 A	135%	60 minutes maximum
1/10 A – 40 A	200%	120 seconds maximum

Product specifications

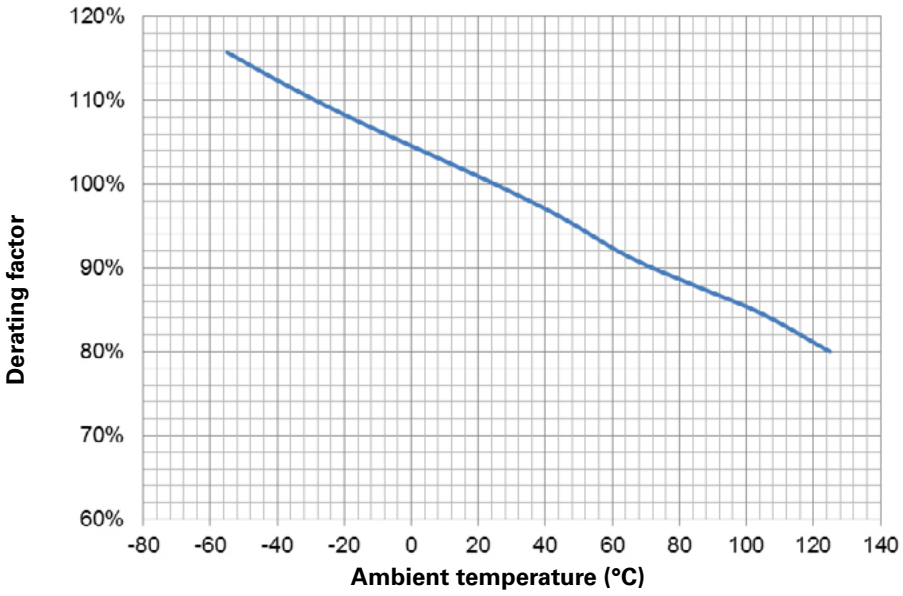
			AC Interrupting rating (A)					
Part Number	Current rating (A)	Voltage rating (Vac)	250 V	125 V	32 V	Typical DC cold resistance[1] (Ω)	Typical melting[2] I^2t (A^2s)	Typical voltage drop[3] (V)
AGC-1/10-R	0.1	250	35	10,000	1000	17.55	0.0010	15.168
AGC-1/8-R	0.125	250	35	10,000	1000	10.825	0.0020	10.854
AGC-3/16-R	0.1875	250	35	10,000	1000	6.050	0.0070	7.652
AGC-2/10-R	0.5	250	35	10,000	1000	4.800	0.0080	6.105
AGC-1/4-R	0.25	250	35	10,000	1000	1.550	0.0160	0.984
AGC-3/10-R	0.3	250	35	10,000	1000	1.084	0.0270	0.886
AGC-3/8-R	0.375	250	35	10,000	1000	0.703	0.0900	0.548
AGC-1/2-R	0.5	250	35	10,000	1000	0.483	0.3850	0.324
AGC-3/4-R	0.75	250	35	10,000	1000	0.272	1.7160	0.309
AGC-1-R	1.0	250	35	10,000	1000	0.167	3.2400	0.256
AGC-1-1/4-R	1.25	250	100	10,000	1000	0.122	5.0940	0.222
AGC-1-1/2-R	1.5	250	100	10,000	1000	0.077	9.0230	0.218
AGC-2-R	2.0	250	100	10,000	1000	0.063	17.520	0.199
AGC-2-1/4-R	2.25	250	100	10,000	1000	0.052	22.832	0.194
AGC-2-1/2-R	2.5	250	100	10,000	1000	0.045	28.688	0.193
AGC-3-R	3.0	250	100	10,000	1000	0.035	45.900	0.191
AGC-4-R	4.0	250	200	10,000	1000	0.024	86.560	0.179
AGC-5-R	5.0	250	200	10,000	1000	0.019	131.500	0.170
AGC-6-R	6.0	250	200	10,000	1000	0.015	144.360	0.165
AGC-7-R	7.0	250	200	10,000	1000	0.012	195.02	0.159
AGC-7-1/2-R	7.5	250	200	10,000	1000	0.012	216.00	0.155
AGC-8-R	8.0	250	200	10,000	1000	0.009	256.00	0.152
AGC-9-R	9.0	250	200	10,000	1000	0.009	395.28	0.148
AGC-10-R	10	250	200	10,000	1000	0.008	486.00	0.141
AGC-12-R	12	32	—	—	1000	0.006	696.96	0.138
AGC-14-R	14	32	—	—	1000	0.005	776.16	0.132
AGC-15-R	15	32	—	—	1000	0.005	807.75	0.128
AGC-20-R	20	32	—	—	1000	0.0034	2440.00	0.125
AGC-25-R	25	32	—	—	1000	0.0027	3875.00	0.120
AGC-30-R	30	32	—	—	1000	0.0024	4950.00	0.135
AGC-35-R	35	32	—	—	1000	0.0021	7350.00	0.130
AGC-40-R	40	32	—	—	1000	0.0016	11360.00	0.125

1. DC cold resistance measured at <10% of rated current
2. Typical melting I^2t measured at listed interrupting rating and rated voltage
3. Typical voltage drop measured at +25 °C and rated current

Dimensions–mm



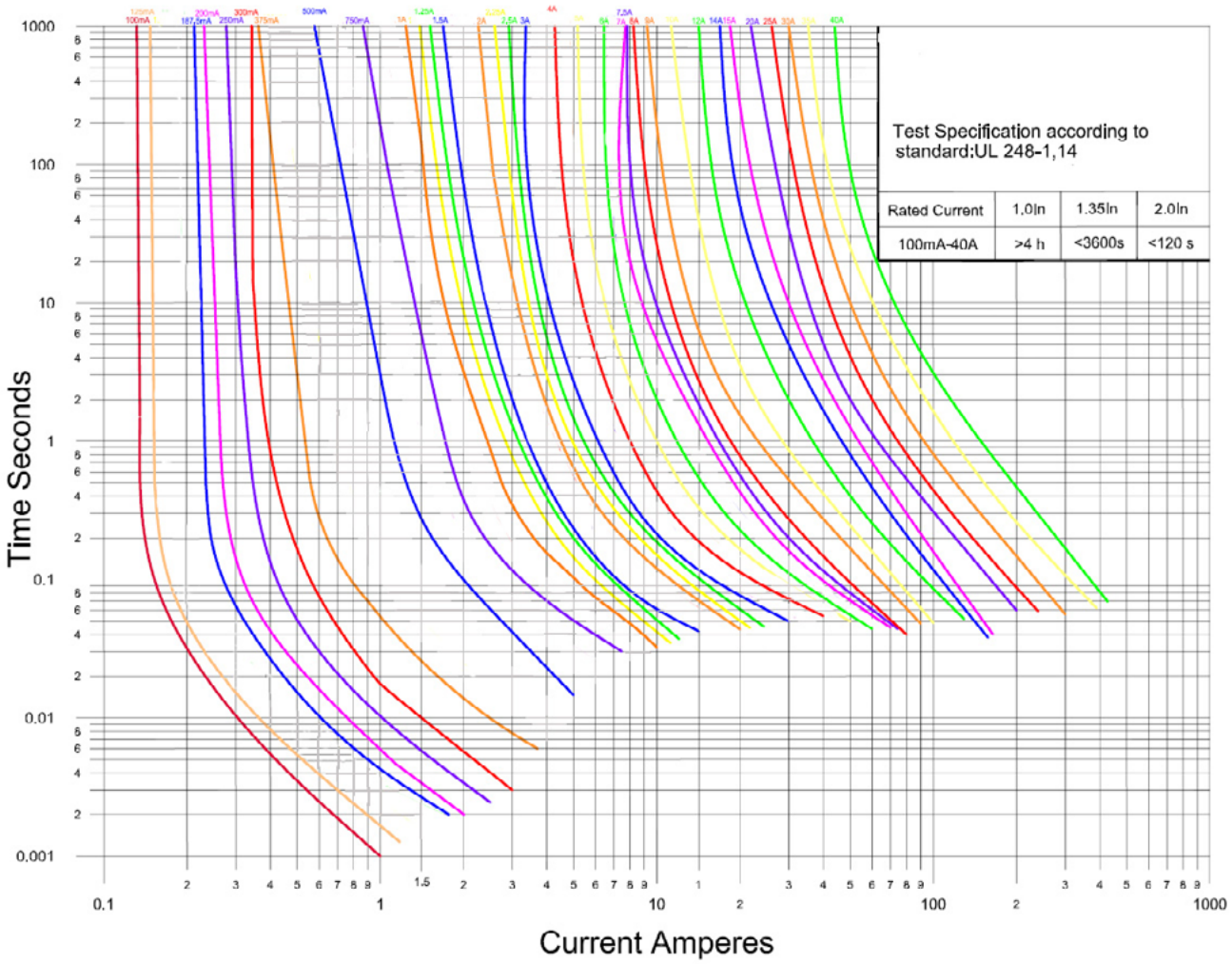
Temperature derating curve



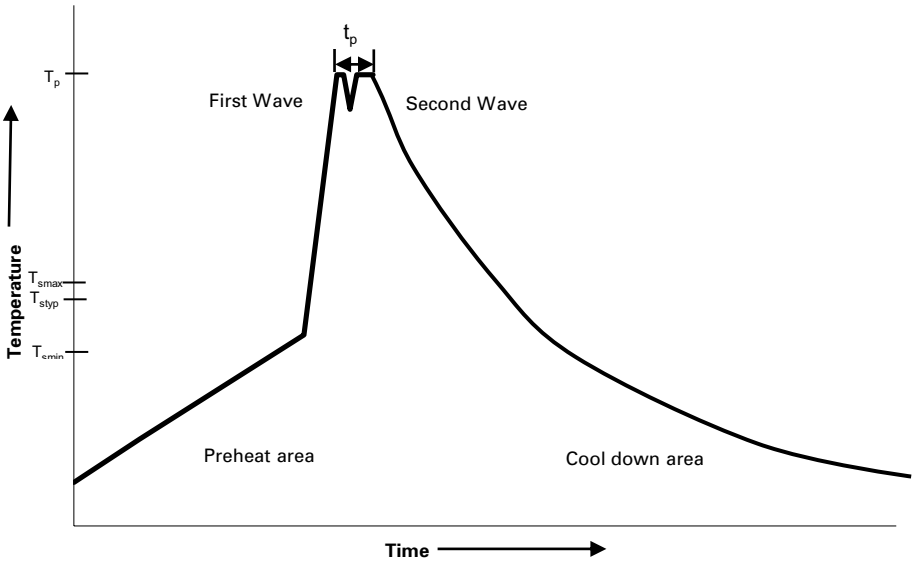
General specifications

Operating temperature: -55 °C to +125 °C (with derating)
Shock: 1/10 A to 3/4 A, MIL-STD-202, Method 213, Test Condition I 1 A to 30 A, MIL-STD-202, Method 207, (HI Shock)
Vibration: 1/10 A to 30 A MIL-STD-202, Method 204, Test Condition A (Except 5f, 500HZ)

Time current curve



Wave solder profile (Axial lead only)



Reference EN 61760-1:2006

Profile feature		Standard SnPb solder	Lead (Pb) free solder
Preheat	• Temperature min. (T_{smin})	100 °C	100 °C
	• Temperature typ. (T_{styp})	120 °C	120 °C
	• Temperature max. (T_{smax})	130 °C	130 °C
	• Time (T_{smin} to T_{smax}) (t_s)	70 seconds	70 seconds
Δ preheat to max Temperature		150 °C max.	150 °C max.
Peak temperature (Tp)*		235 °C – 260 °C	250 °C – 260 °C
Time at peak temperature (t_p)		10 seconds max 5 seconds max each wave	10 seconds max 5 seconds max each wave
Ramp-down rate		~ 2 K/s min ~3.5 K/s typ ~5 K/s max	~ 2 K/s min ~3.5 K/s typ ~5 K/s max
Time 25 °C to 25 °C		4 minutes	4 minutes

Manual solder

+350 °C (4-5 seconds by soldering iron), generally manual/hand soldering is not recommended

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