2AG Slo-Blo® Fuse 229/230 Series

The 2AG Slo-Blo® fuses are available in cartridge form or with axial leads. Axial leaded fuses are board washable. 2AG fuses provide the same performance characteristics as their 3AG counterpart, while occupying one-third the space. Sleeved fuses are available.

ELECTRICAL CHARACTERISTICS:

% of Ampere Rating	Opening Time
100%	4 hours, **Min**imum
135%	1 hour, **Max**imum
200%	3 seconds, **Min**imum
	20 seconds, **Max**imum

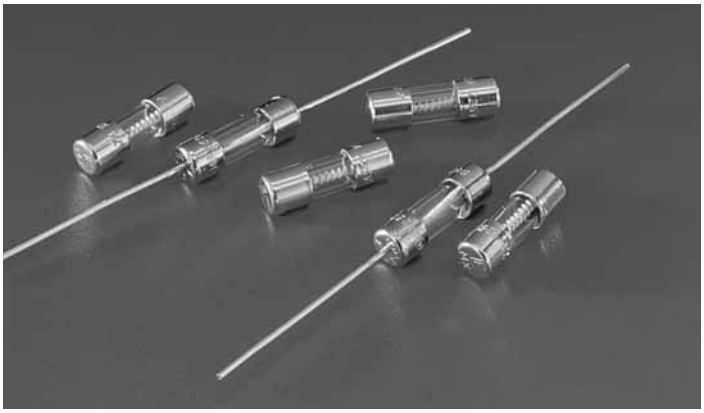
AGENCY APPROVALS: Listed by Underwriters Laboratories and Certified by CSA through 3.5 amperes. Recognized under the Components Program of Underwriters Laboratories from 4 through 7 amperes. 1 through 7 amperes approved by METI.

AGENCY FILE NUMBERS: UL E10480, CSA LR 29862.

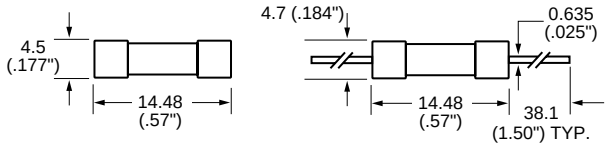
INTERRUPTING RATINGS:

0.25–3.5A	10,000 amperes at 125VAC
4–7A	400 amperes at 125VAC
0.25–1A	35 amperes at 250VAC
1.25–3.5A	100 amperes at 250VAC

PACKAGING OPTIONS: 230 Series available on Tape and Reel per EIA-296. For 1500 pieces per reel, add packaging suffix DRT1W. See page 8 for pitch dimensions. 229 and 230 series available in bulk packaging. For 1000 pieces bulk, add packaging suffix M.

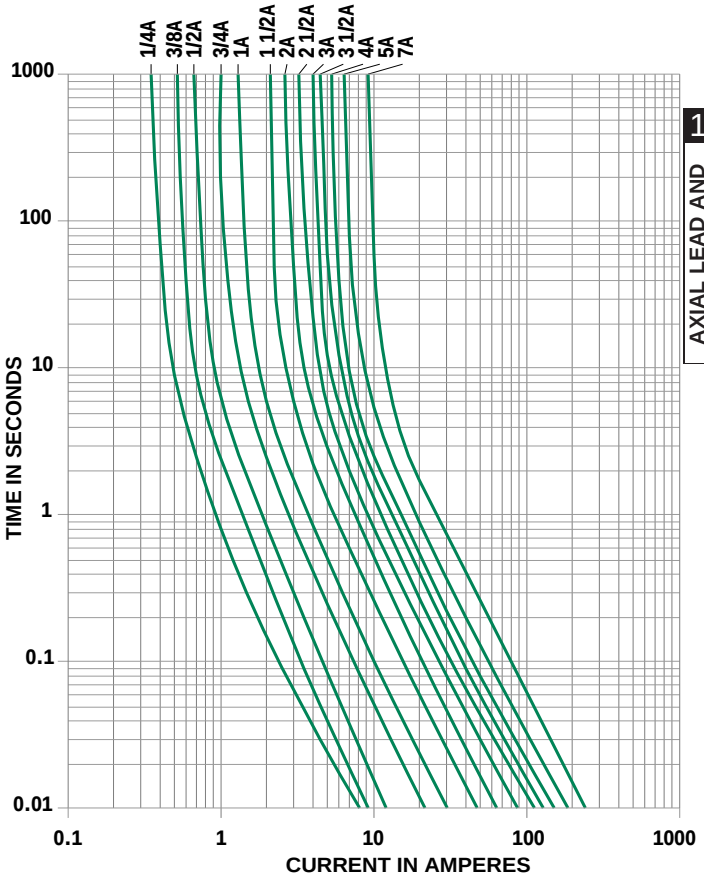


229 000 **Series** **230** 000 **Series**



Axial Lead Material: Solder coated copper.

Average Time Current Curves



ORDERING INFORMATION:

Cartridge Catalog Number	Axial Lead Catalog Number	Ampere Rating	Voltage Rating	Nominal Resistance Cold Ohms	Nominal Melting I²t A² Sec.
229.250	**230**.250	1/4	250	2.41	0.216
229.350	**230**.350	.350	250	1.30	0.490
229.375	**230**.375	3/8	250		0.580
229.500	**230**.500	1/2	250	0.688	1.16
229.600	**230**.600	6/10	250	0.477	1.75
229.750	**230**.750	3/4	250	0.340	2.95
229.800	**230**.800	8/10	250	0.304	3.45
229 001	**230** 001	1	250		5.64
229 1.25	**230** 1.25	1¼	250	0.145	9.80
229 01.5	**230** 01.5	1½	250	0.107	15.0
229 002	**230** 002	2	250	0.0692	30.0
229 2.25	**230** 2.25	2¼	250	0.0562	39.0
229 02.5	**230** 02.5	2½	250	0.0498	50.0
229 003	**230** 003	3	250	0.0380	77.0
229 03.5	**230** 03.5	3½	250	0.0310	110.0
229 004	**230** 004	4	125	0.0256	148.0
229 005	**230** 005	5	125	0.0185	267.0
229 006	**230** 006	6	125	0.0140	380.0
229 007	**230** 007	7	125	0.0115	464.0

2AG Slo-Blo® Fuse 229/230 Series

SURGE WITHSTAND SPECIFICATIONS

Our standard 229 and 230 Series Slo-Blo® fuses meet the demanding requirements of the Telecom industry. These Fuses combine conventional overcurrent protection with the ability to withstand high current, short duration pulses. These fuses comply with the short circuit requirements of UL 1459 for telephone equipment. Insulating Sleeve Option available. We have characterized these fuses for the Telecom industry requirements as shown below.

ELECTRICAL CHARACTERISTICS:

Short Circuit Capabilities:

UL 60950 (UL 1459 Included): 60A, 600VAC
40A, 600VAC
7A, 600VAC
2.2A, 600VAC

• Meets UL 497 Specifications

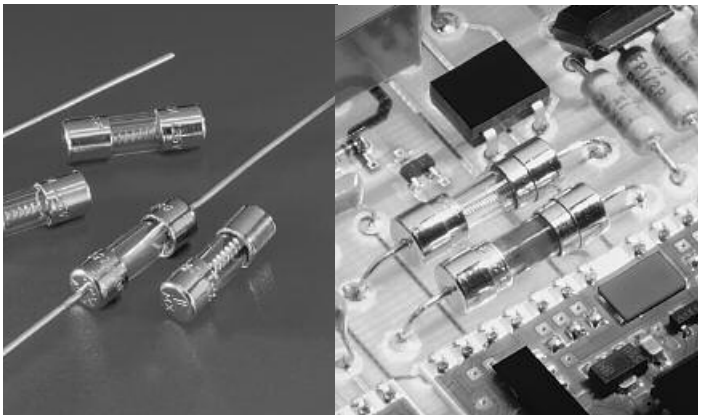
PEAK WITHSTAND CURRENT (Ip): These fuses will withstand 50 repetitions of a double exponential impulse wave having peak currents (Ip) and peak voltages as listed.

Cartridge Catalog Number	Axial Lead Catalog Number	Ampere Rating	10 x 160 microsec. 1500V	10 x 560 microsec. 800V	10 x 1000 microsec. 1000V
229.250	**230**.250	1/4	23.0A	16.6A	12.4A
229.350	**230**.350	.350	34.0A	25.8A	19.3A
229.375	**230**.375	3/8	40.0A	25.4A	19.0A
229.500	**230**.500	1/2	60.0A	37.7A	28.2A
229.600	**230**.600	6/10	71.0A	47.2A	35.3A
229.750	**230**.750	3/4	91.0A	65.5A	49.0A
229.800	**230**.800	8/10	104.0A	68.9A	51.6A
229 001	**230** 001	1	130.0A	88.6A	66.3A
229 1.25	**230** 1.25	1¼[1]	162.0A	118.1A	100.0A

[1] 500A peak, 2500V, 2 x 10 microseconds, 20 repetitions.

INDICATING SLO-BLO® FUSE

The 2AG Indicating Slo-Blo® fuse instantly identifies itself upon opening by showing a discoloration of its glass body. Guesswork and time consuming circuit testing are eliminated. This unique design offers the same quality performance characteristics as the standard 2AG fuse design.



* When ordering the 2AG Indicating Slo-Blo Fuse, an 'S' is required after the catalog number.

Example:
-1A Indicating Slo-Blo® Fuse = 230 001S

2AG 229/230 Series General Specifications

ENVIRONMENTAL SPECIFICATIONS:
Operating Temperature: –55°C to 125°C.
Shock: MIL-STD-202, Method 213, Test Condition I (100 G's peak for 6 milliseconds).
Vibration: MIL-STD-202, Method 201 (10–55 Hz, 0.06 inches total excursion).
Salt Spray: MIL-STD-202 Method 101, Test Condition B (48 hours).
Insulation Resistance (After Opening): MIL-STD-202, Method 302, Test Condition B.
Resistance to Soldering Heat: (Axial Leaded Fuses): MIL-STD-202, Method 210A, Test Condition B (260°C, 3 Seconds).
Thermal Shock: MIL-STD-202, Method 107, Test Condition B (–65°C to 125°C).
Moisture Resistance: MIL-STD-202, Method 106 (90-98% RH, 65°C).
Solderability: (Axial Leaded Fuses): MIL-STD-202, Method 208.

PHYSICAL SPECIFICATIONS:
Materials: Glass Body, Nickel-Plated Brass Fuse Caps. (Insulating sleeve option available).

SOLDERING PARAMETERS:
Wave solder — 500°F (260°C), 3 seconds Max.
Reflow solder — Not recommended.

2AG Special Surge Withstand

Slo-Blo® Type

AXIAL LEAD PART NUMBER: 220 003 (0.35A)
ELECTRICAL CHARACTERISTICS:

Amperes	Opening Time
0.35A	4 hours, **Min**imum
0.6A	90 seconds, **Max**imum
2.0A	2 seconds, **Max**imum
6.0A	0.5 second, **Max**imum

INTERRUPTING RATINGS: Same as **230 Series.**
LIGHTNING SURGE WITHSTAND CAPABILITY: 25 amperes peak, 800V, 10 x 560 microseconds.
PATENTED
Refer to page 50 for other Surge Withstand Fuses.