

# Midget Fuses

Supplementary Overcurrent Protection



## KLK Fuses

### FAST-ACTING ■ 600 VAC

Fast-acting, high-interrupting capacity, current-limiting type fuse. Especially suited for control circuits, street lighting, H.I.D. lighting, computers, and other applications without high inrush currents.

**Voltage Rating:** 600 Volts AC  
500 Volts DC

**Interrupting Rating:** UL Listed 100,000 amperes rms symmetrical  
(Capable of 200,000 amperes)

#### Ampere Ratings:

$\frac{1}{10}$	1	4	10
$\frac{1}{8}$	1½	5	12
$\frac{3}{10}$	2	6	15
$\frac{1}{4}$	2½	7	20
$\frac{3}{10}$	3	8	25
$\frac{1}{2}$	3½	9	30
$\frac{3}{4}$			

**Approvals:** Standard 248-14  
UL Listed 3/10-30A  
(File No: E10480)  
CSA Certified 3/10-30A  
(File No: LR29862)  
Versions available to meet  
MIL-F-5160/60, QPL F60C:  
Contact Factory.

**Dimensions:** 13/32" x 1-1/2"

Example part number (series & ampereage): KLK 1-1/2



## KLKD Fuses

### FAST-ACTING ■ 600 VAC/DC

Fast-acting, high-interrupting capacity, current-limiting type fuse. Especially suited for DC control circuits, street lighting, H.I.D. lighting, computers, and other applications.

**Voltage Rating:** 600 Volts AC/DC

**Interrupting Rating:** AC: 100,000 amperes rms symmetrical; DC: 10,000 amperes

#### Ampere Ratings:

$\frac{1}{10}$	1	4	10
$\frac{1}{8}$	1½	5	12
$\frac{3}{10}$	2	6	15
$\frac{1}{4}$	2½	7	20
$\frac{3}{10}$	3	8	25
$\frac{1}{2}$	3½	9	30
$\frac{3}{4}$			

**Approvals:** Standard 248-14  
UL Listed 3/10-30A  
(File No: E10480)  
CSA Certified 3/10-30A  
(File No: LR29862)

**Dimensions:** 13/32" x 1-1/2"

Example part number (series & ampereage): KLKD 30



## FLM Fuses

### TIME-DELAY ■ 250 VAC

Use FLM 250 volt time-delay fuses to protect control circuit transformers, solenoids, and other circuits with high inrush currents. Excellent for supplemental protection of small motors. For motor branch-circuit protection, See Class CC fuses.

**Voltage Rating:** 250 Volts AC

**Interrupting Rating:** AC: 10,000 amperes rms symmetrical.

#### Ampere Ratings:

$\frac{1}{10}$	1½	3	7
$\frac{1}{8}$	1½	3½	8
$\frac{3}{10}$	1½	3½	9
$\frac{1}{4}$	1½	4	10
$\frac{3}{10}$	1½	4½	12
$\frac{1}{2}$	2	5	15
$\frac{3}{10}$	2	5½	20
$\frac{1}{2}$	2½	6	25
$\frac{3}{4}$	2½	6½	30
1	2½		

**Approvals:** Standard 248-14  
UL Listed (File No: E10480)  
CSA Certified  
(File No: LR29862)

**Dimensions:** 13/32" x 1-1/2"

Example part number (series & ampereage): FLM 15



## FLQ Fuses

### TIME-DELAY ■ 500 VAC

These 500 volt time-delay fuses provide excellent supplemental protection of control power transformers, solenoids, and circuits with high inrush currents. UL and CSA 500 volt ratings permit use on 480 volt circuits. FLQ fuses also provide supplemental protection to small motors. For motor branch-circuit protection, see Class CC fuses.

**Voltage Rating:** 500 Volts AC

**Interrupting Rating:** 10,000 amperes rms symmetrical

#### Ampere Ratings:

$\frac{1}{10}$	$\frac{3}{10}$	8
$\frac{1}{8}$	1	3½
$\frac{1}{8}$	1½	4
$\frac{3}{16}$	1½	4½
$\frac{3}{10}$	1½	5
$\frac{1}{4}$	1½	5½
$\frac{3}{10}$	2	6
$\frac{1}{2}$	2½	6½
$\frac{1}{2}$	2½	7
$\frac{3}{4}$	3	

**Approvals:** Standard 248-14  
UL Listed (File No: E10480)  
CSA Certified  
(File No: LR29862)

**Dimensions:** 13/32" x 1-1/2"

Example part number (series & ampereage): FLQ 1/2

## RECOMMENDED FUSE BLOCKS

L60030M series. Refer to Fuse Block section of this catalog for additional information.

Midget & Electronic Fuses



# Midget Fuses

Supplementary Overcurrent Protection

Midget & Electronic Fuses



## BLN Fuses

### FAST-ACTING ■ 250 VAC

Fiber tube, 250 volt BLN fuses provide low-cost protection for military applications and control circuits.

**Voltage Rating:** 250 Volts AC

**Interrupting Rating:** 10,000 amperes rms symmetrical

#### Ampere Ratings:

1	5	10	20
2	6	12	25
3	8	15	30
4			

**Approvals:** Standard 248-14  
UL Listed (File No: E10480)  
CSA Certified  
(File No: LR29862)  
Versions available to meet  
MIL-F-15160/9, QPL F09A:  
Contact Factory

**Dimensions:** 13/32" x 1-1/2"

Example part number (series & amperage): BLN 30



## BLF Fuses

### FAST-ACTING ■ 125/250 VAC

Laminated tube BLF fuses are the lowest price midget fuse. They are suitable for control circuit and instrument protection in dry locations.

**Voltage Ratings:** 250 Volts AC: 1/2 – 15 amperes; 125 Volts AC: 20 – 30 amperes

**Interrupting Rating:** 10,000 amperes rms symmetrical

#### Ampere Ratings:

1/2	3	7	15
1	4	8	20
1 1/2	5	9	25
2	6	10	30
2 1/2	6 1/4	12	

**Approvals:** Standard 248-14  
UL Listed (File No: E10480)  
CSA Certified  
(File No: LR29862)

**Dimensions:** 13/32" x 1-1/2"

Example part number (series & amperage): BLF 5



## BLS Fuses

### FAST-ACTING ■ 250/600 VAC

BLS fuses are 1-3/8" long in contrast to other midget fuses which are 1-1/2". They provide space-saving, low-cost, protection to street lighting, metering, control and electronic circuits.

**Voltage Rating:** 600 Volts AC: 2/10 – 5 amperes; 250 Volts AC: 6 – 10 amperes

**Interrupting Rating:** 10,000 amperes rms symmetrical

#### Ampere Ratings:

3/10	1	2	6
4/10	1 1/2	3	7
1/2	1 1/10	4	8
3/4	1 1/10	5	10
8/10			

**Approvals:** Standard 248-14  
UL Listed 1/2-5 Amps  
(File No: E10480)  
CSA Certified 1/2 – 5 Amps  
(File No: LR29862)

**Dimensions:** 13/32" x 1-3/8"

Example part number (series & amperage): BLS 10



## FLA Fuses

### TIME-DELAY ■ 125 VAC

FLA fuses are 125 volt, *pin-indicating* time-delay fuses for protection of control circuit transformers, solenoids, and other circuits with high inrush currents. Metal indicating pin "pops-out" when fuse opens. Pin gives visual indication of open fuse. Use FLA fuses in conjunction with special fuseblocks to operate mechanical signal switches or energize alarm circuits. Fuses rated 12 amperes and above have dual-tube construction.

**Voltage Rating:** 125 Volts AC

**Interrupting Rating:** 10,000 amperes rms symmetrical

#### Ampere Ratings:

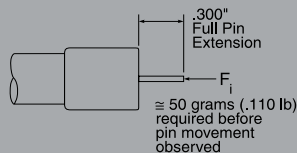
1/10	1 1/4	2 1/10	6 1/4
1 1/100	1 1/4	3	7
3/10	1 1/10	3 1/10	8
1/4	1 1/2	3 1/2	10
3/10	1 1/10	4	12 *
4/10	1 1/10	4 1/2	15 *
1/2	2	5	20 *
6/10	2 1/4	5 1/10	25 *
8/10	2 1/2	6	30 *
1			

**Approvals:** Standard 248-14  
UL Listed (File No: E10480)  
CSA Certification Pending

**Dimensions:** 13/32" x 1-1/2"

\* Note: Dual tube construction

Example part number (series & amperage): FLA 15



## RECOMMENDED FUSE BLOCKS

L60030M series. Refer to Fuse Block section of this catalog for additional information.



# Midget Fuses

Supplementary Overcurrent Protection

NEW



## KLQ Series Fuses

The Littelfuse KLQ series is designed to protect gaseous vapor fixtures, HID ballasts, and other electronic and lighting circuits. The KLQ is the same physical size as the Littelfuse BLS, but has more time delay to handle transient and inrush currents.

## SPECIFICATIONS

**Voltage Rating:** 600VAC

**Interrupting Rating:** 10,000 amperes

**Ampere Range:** 1 – 6 amperes

**Approvals:** Standard 248-14 UL Listed (File No: E10480)

**Dimensions:** 13/32" x 1-3/8"

## AMPERE RATINGS

1	2	4	6
1-6/10	3	5	

## RECOMMENDED FUSE BLOCKS

L60030M Series. Refer to Fuse Block section of this catalog for additional information.

## ORDERING INFORMATION

Example catalog number: KLQ005

Example system number: 0KLQ005.T

## CROSS REFERENCE

Littelfuse	Buss	Ferraz-Shawmut
KLQ	KTQ	–

Midget & Electronic Fuses

NEW



## FLU Series Fuses

The Littelfuse FLU series is designed specifically for the protection of multimeters. The 1000 VAC/VDC rating also makes the FLU ideal for a variety of other applications.

## SPECIFICATIONS

**Voltage Rating:** 1000 VAC/VDC

**Interrupting Rating:** 44/100A: 10kA  
11A: 20kA

**Ampere Range:** 44/100 and 11 amperes

**Approvals:** UL Recognized under the components program.  
(File No: E10480)  
CSA Certified (File No: LR29862)

**Dimensions:** 44/100A: 13/32" x 1-3/8"  
11A: 13/32" x 1-1/2"

## ORDERING INFORMATION

Example catalog number: FLU011

Example system number: 0FLU011.T

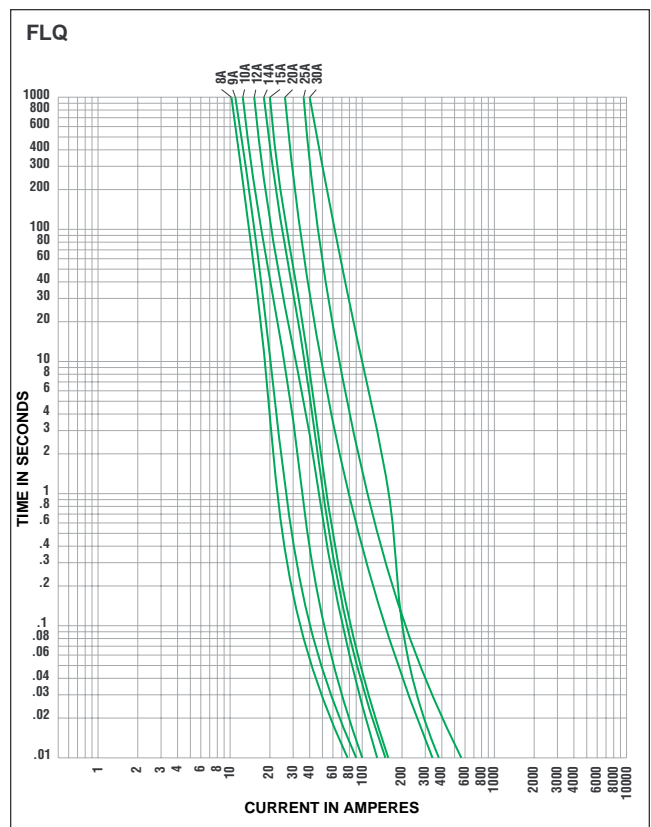
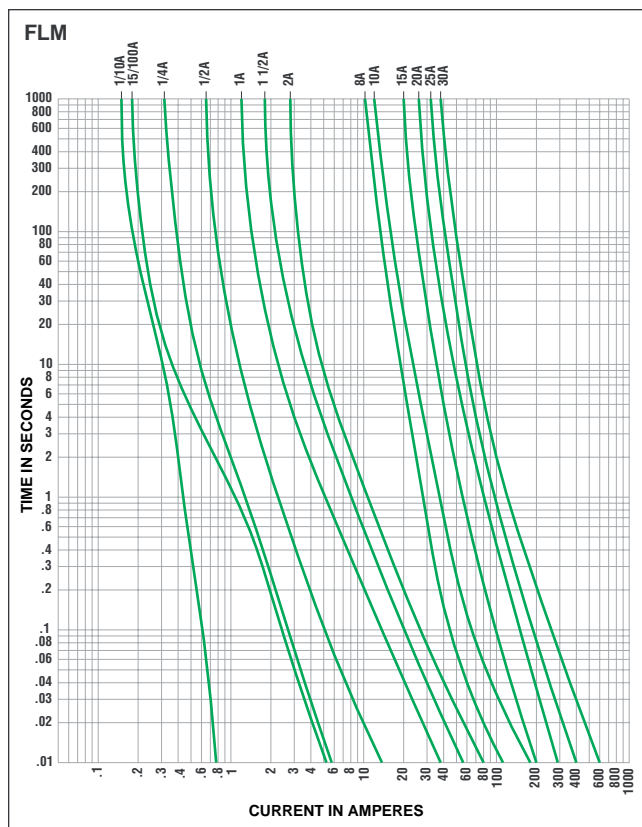
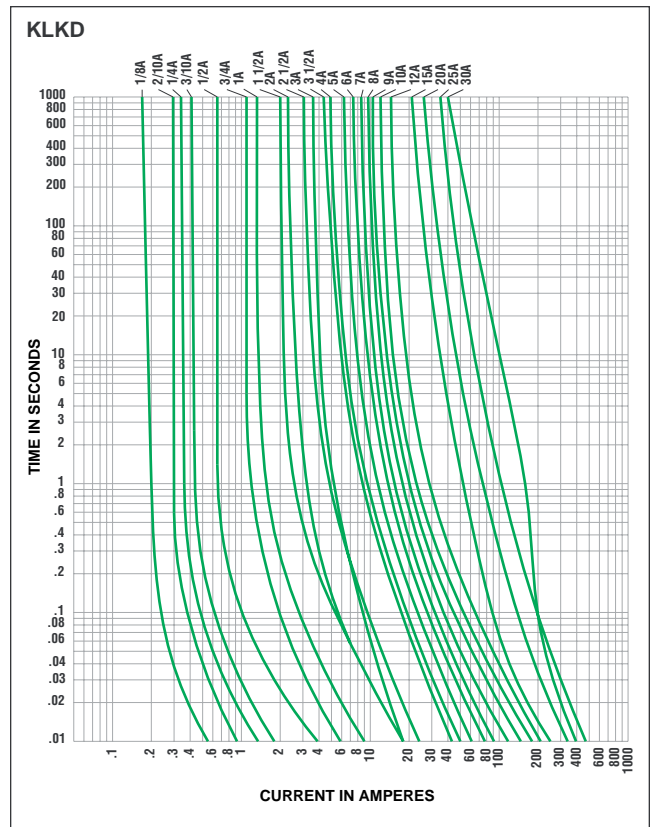
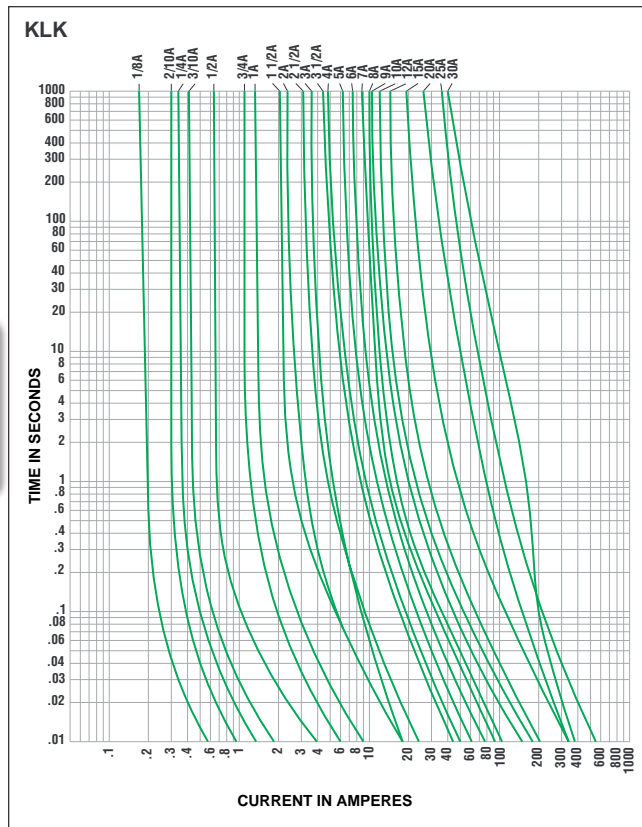
## CROSS REFERENCE

Littelfuse	Buss	Ferraz-Shawmut
FLU	DMM	–



# Midget Fuses

Supplementary Overcurrent Protection







### 312/318 Series

#### 3AG FAST-ACTING FUSE

Fast-acting protection of electronic equipment and appliances. The "standard" fast-acting, glass tube fuse.

**Voltage Rating:** 250V: 1/100 – 10A.  
32V: 12 – 35A.

#### Ampere Ratings:

$\frac{1}{100}$	0.175	$\frac{1}{2}$	$1\frac{1}{2}$	4	12
$\frac{1}{50}$	$\frac{1}{6}$	$\frac{1}{2}$	$1\frac{1}{2}$	5	15
$\frac{1}{25}$	$\frac{1}{3}$	$\frac{1}{2}$	2	6	20
$\frac{1}{10}$	$\frac{1}{2}$	1	$2\frac{1}{2}$	7	25
$\frac{1}{5}$	$\frac{1}{2}$	$1\frac{1}{2}$	$2\frac{1}{2}$	8	30
$\frac{15}{100}$	$\frac{1}{2}$	$1\frac{1}{2}$	3	10	35

**Approvals:** Standard 248-14, UL Listed 1/100-10 Amps and UL Listed 12 – 30 Amps per Standard UL 275. CSA Certified through 30 Amps.

**Dimensions:** 1/4" x 1-1/4" (6.4 x 31.8mm)

For fuses with axial leads, request 318 series. Order 312 series without leads.

Example part number (series & amperage): **312.375**



### 314/324 Series

#### 3AB FAST-ACTING FUSE

Similar to 312 series, but ceramic tube permits additional ampere ratings: 250 volt ratings through 20 amps, and 125 volts through 30 amps.

**Voltage Rating:** 250V: 1/8 – 20A.  
125V: 25 – 30A.

#### Ampere Ratings:

$\frac{1}{8}$	$\frac{1}{4}$	3	6	10	20
$\frac{1}{4}$	1	4	7	12	25
$\frac{1}{2}$	2	5	8	15	30

**Approvals:** Standard 248-14, UL Listed and CSA Certified 1/8 – 15 Amps. UL Recognized under the Components Program and CSA Recognized under the Component Acceptance Program 20 – 30 Amps. Approved by MITI from 10 – 30 Amps.

**Dimensions:** 1/4" x 1-1/4" (6.4 x 31.8mm)

For fuses with axial leads, request 324 series. Order 314 series without leads.

Example part number (series & amperage): **324.375**



### 313/315 Series

#### 3AG SLO-BLO® FUSE

313 and 315 series fuses have time-delay in the overload range, which provides superior protection for inductive loads such as motors, transformers, and solenoids.

**Voltage Rating:** 250V: 1/100 – 8A. 32V: 10 – 30A.

#### Ampere Ratings:

$\frac{1}{100}$	0.175	$\frac{1}{2}$	$1\frac{1}{2}$	$2\frac{1}{2}$	8
$\frac{1}{50}$	$\frac{1}{6}$	$\frac{1}{2}$	$1\frac{1}{2}$	3	10
$\frac{1}{25}$	$\frac{1}{3}$	$\frac{1}{2}$	$1\frac{1}{2}$	$3\frac{1}{2}$	12
$\frac{1}{10}$	$\frac{1}{2}$	$\frac{1}{2}$	$1\frac{1}{2}$	4	15
$\frac{1}{5}$	$\frac{1}{2}$	$\frac{1}{2}$	2	5	20
$\frac{1}{2}$	$\frac{1}{2}$	1	$2\frac{1}{2}$	$6\frac{1}{2}$	25
$\frac{15}{100}$	$\frac{1}{2}$	$1\frac{1}{2}$	$2\frac{1}{2}$	7	30

**Approvals:** Standard 248-14, UL Listed and CSA Certified 1/100-8 Amps. UL Recognized under the Components Program and CSA Recognized under the Component Acceptance Program 10 – 30 Amps. MITI approved 1 – 5 Amps.

**Dimensions:** 1/4" x 1-1/4" (6.4 x 31.8mm)

For fuses with axial leads, request 315 series. Order 313 series without leads.

Example part number (series & amperage): **313.500**



### 326/325 Series

#### 3AB SLO-BLO® FUSE

The 326 series fuse has time-delay similar to the 313 series, but the ceramic body permits higher voltage ratings for the 8 – 30 ampere sizes and faster opening of short circuits.

**Voltage Rating:** 250V: 1/100 – 20A.  
125V: 25 – 30A.

#### Ampere Ratings:

$\frac{1}{100}$	$\frac{1}{6}$	$\frac{1}{2}$	$1\frac{1}{2}$	4	15
$\frac{1}{50}$	$\frac{1}{3}$	$\frac{1}{2}$	$1\frac{1}{2}$	5	20
$\frac{1}{25}$	$\frac{1}{2}$	$\frac{1}{2}$	2	$6\frac{1}{2}$	25
$\frac{1}{10}$	$\frac{1}{2}$	$\frac{1}{2}$	$2\frac{1}{2}$	7	30
$\frac{1}{5}$	$\frac{1}{2}$	1	$2\frac{1}{2}$	8	
$\frac{15}{100}$	$\frac{1}{2}$	$1\frac{1}{2}$	3	10	
0.175	$\frac{1}{2}$	$1\frac{1}{2}$	$3\frac{1}{2}$	12	

**Approvals:** Standard 248-14, UL Listed 1/4 – 10 Amps. UL Recognized under the Components Program 12-30 Amps. CSA Certified 1/4 – 30 Amps.

**Dimensions:** 1/4" x 1-1/4" (6.4 x 31.8mm)

For fuses with axial leads, request 325 series. Order 326 series without leads.

Example part number (series & amperage): **326012**





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### 229/230 Series

#### 2AG SLO-BLO® INDICATING FUSE

2AG indicating fuses instantly identify themselves upon opening by showing a discoloration of their glass bodies. Guesswork and time-consuming circuit testing is eliminated. This unique design offers the same quality performance characteristics as the standard 2AG fuse design.

**Voltage Rating:** 250V: ¼ – 3½A; 125V: 4 – 7A

##### Ampere Ratings:

¼	¾	1	2	3	5
.350	¾	1¼	2¼	3½	6
¾	¾	1½	2½	4	7
½					

**Approvals:** Standard 248-14, UL Listed and CSA Certified 1/4 – 3-1/2 Amps. UL Recognized under the Components Program and CSA Recognized under the Component Acceptance Program 4 – 7 Amps.

**Dimensions:** .177" x .57" (4.5 x 14.5mm)

For fuses with axial leads, request 230\_\_S series. Order 229\_\_S series without leads.

Example part number (series & amperage): **22902.5S**



### 313 Series

#### 3AG SLO-BLO® INDICATING FUSE

3AG indicating fuses instantly identify themselves upon opening by showing a discoloration of their glass bodies. Guesswork and time-consuming circuit testing is eliminated. This unique design offers the same quality performance characteristics as the standard 3AG fuse design.

**Voltage Rating:** 250V: ½ – 8A. 32V: 10A.

##### Ampere Ratings:

½	1½	3	5	7	10
1	2	4	6¼	8	

**Approvals:** Standard 248-14, UL Listed and CSA Certified 1/2 – 8 Amps. The 10 Amp is UL Recognized under the Components Program and CSA Recognized under the Component Acceptance Program.

**Dimensions:** 1/4" x 1-1/4": (6.4 x 31.8mm)

Example part number (series plus amperage, followed by "ID"): **313007 ID**



### 334 Series

#### 3AB FAST-ACTING PIN INDICATING

**3AB** Pin Indicating fuses provide visual indication and may be used to activate an alarm circuit. Indicating Pin extends a minimum of 3/16" from the end of the fuse when the fuse is blown.

**Voltage Rating:** 125V: ¾ – 6A.

##### Ampere Ratings:

¾	1½	3	5
1	2	4	6

**Approvals:** Standard 248-14, UL Listed: 3/4 – 5 Amps.

**Dimensions:** 1/4" x 1-1/4"

Order 334 series for silver indicating pin.

Example part number (series & amperage): **334004**



### 481 Series

#### FAST-ACTING INDICATING/ALARM FUSE

For telecommunications equipment and similar applications. Color-coded indicator flags indicate ampere rating. Body is constructed of black polyphenylene sulfide with UL 94V0 flammability rating, contacts are of bright alloy-plated beryllium copper.

**Voltage Rating:** 125V AC, DC

##### Ampere Ratings:

18/100	65/100	1½	3	5	12
¼	¾	1½	3½	7½	15
½	1	2	4	10	

**Approvals:** UL Recognized under the Components Program and CSA Recognized under the Component Acceptance Program.

Example part number (series & amperage): **481005**

##### Recommended Fuse Blocks:

Part Number 482001.





### 215 Series (Type T) 5 X 20MM SLO-BLO® FUSE

Time-delay protection of electronic equipment and appliances when fuses to International Standards are required. Replacement fuses for foreign equipment.

**Voltage Rating:** 250V AC

**Ampere Ratings:**

.200	.400	.800	1.6	3.16	6.3
.250	.500	1	2	4	8*
.315	.630	1.25	2.5	5	10*

\*Available but not included in International Standards.

**Interrupting Capacity:** 1500A

**Approvals:** UL Recognized under the Components Program and CSA Recognized under the Component Acceptance Program. SEMKO, VDE, and BSI approved 1 – 6.3 Amps. MITI approved 1 – 10 Amps.

**Design Standards:** Meets IEC 60127-2, Sheet 5 Specification for Time Lag fuses.

**Dimensions:** 5mm x 20mm (.2 x .79 in.)

*Example part number (series & amperage): 215.315*



### 216 Series (Type F) 5 X 20MM FAST-ACTING FUSE

Fast-acting protection of electronic equipment and appliances when fuses to International Standards are required. Replacement fuse for foreign equipment.

**Voltage Rating:** 250V AC

**Ampere Ratings:**

.050	.125	.315	.800	2	5
.063	.160	.400	1	2.5	6.3
.080	.200	.500	1.25	3.15	8*
.100	.250	.630	1.6	4	10*

\*Available but not included in International Standards.

**Interrupting Capacity:** 1500A

**Approvals:** UL Recognized under the Components Program and CSA Recognized under the Component Acceptance Program. SEMKO and VDE approved through 6.3 Amps. BSI approved 1 – 6.3 Amps.

**Design Standards:** Meets IEC 60127-2, Sheet 1 Specification for Fast-Acting Fuses.

**Dimensions:** 5mm x 20mm (.2 x .79 in.)

*Example part number (series & amperage): 216.200*



### 217 Series (Type F) 5 X 20MM FAST-ACTING FUSE

Fast-acting protection of electronic equipment and appliances when fuses to International Standards are required. Replacement fuse for foreign equipment.

**Voltage Rating:** 250V AC

**Ampere Ratings:**

.032	.100	.315	.800	2	5
.040	.125	.400	1	2.5	6.3
.050	.160	.500	1.25	3.15	8*
.063	.200	.630	1.6	4	10*
.080	.250				15*

\*Available but not included in International Standards.

**Interrupting Capacity:** 35A or 10x rated current, whichever is greater.

**Approvals:** UL Recognized under the Components Program and CSA Recognized under the Component Acceptance Program. SEMKO and VDE approved through 6.3 Amps. BSI approved 0.4 – 6.3 Amps.

**Design Standards:** Meets IEC 60127-2, Sheet 2 Specification for Fast-Acting Fuses.

**Dimensions:** 5mm x 20mm (.2 x .79 in.)

*Example part number (series & amperage): 217.050*



### 218 Series (Type T) 5 X 20MM SLO-BLO® FUSE

Time-delay protection of electronic equipment and appliances when fuses to International Standards are required. Replacement fuses for foreign equipment.

**Voltage Rating:** 250V AC

**Ampere Ratings:**

.032	.100	.315	.800	2	5
.040	.125	.400	1	2.5	6.3
.050	.160	.500	1.25	3.15	8*
.063	.200	.630	1.6	4	10*
.080	.250				15*

\*Available but not included in International Standards.

**Interrupting Capacity:** 35A or 10X rated current, whichever is greater.

**Approvals:** UL Recognized under the Components Program and CSA Recognized under the Component Acceptance Program. SEMKO and VDE approved through 6.3 Amps. BSI approved 0.8 – 6.3 Amps.

**Design Standards:** Meets IEC 60127-2, Sheet 3 Specification for Time Lag Fuses.

**Dimensions:** 5mm x 20mm (.2 x .79 in.)

*Example part number (series & amperage): 218.630*



# Electronic Fuses

5 x 20mm and 2AG Type



## 235/236 Series

### 5 X 20MM FAST-ACTING FUSE

5 x 20mm fuses designed to UL and CSA standards. Fast-Acting protection of electronic equipment appliances.

**Voltage Rating:** 250V:  $\frac{1}{10}$  – 3A. 125V: 4 – 6A.

#### Ampere Ratings:

$\frac{1}{10}$	$\frac{3}{10}$	$\frac{1}{2}$	1	2	4
$\frac{1}{5}$	$\frac{1}{2}$	$\frac{3}{4}$	1 $\frac{1}{4}$	2 $\frac{1}{2}$	5
$\frac{3}{10}$	$\frac{1}{2}$	$\frac{1}{2}$	1 $\frac{1}{2}$	3	6
$\frac{1}{2}$					

**Approvals:** Standard 248-14, UL Listed and CSA Certified. MITI approved 1 – 5 Amps.

**Dimensions:** 5mm x 20mm (.2 x .79 in.)

For fuses with axial leads, request 236 series. Order 235 series without leads.

Example part number (series & amperage): **235.600**

## 239/238 Series

### 5 X 20MM SLO-BLO® FUSE

5 x 20mm fuses designed to UL and CSA standards. For protection of electronic equipment and appliances.

**Voltage Rating:** 250V:  $\frac{1}{10}$  – 3A. 125V: 4A.

#### Ampere Ratings:

$\frac{1}{10}$	$\frac{3}{10}$	$\frac{1}{2}$	1	2	4
$\frac{1}{5}$	$\frac{1}{2}$	$\frac{3}{4}$	1 $\frac{1}{4}$	2 $\frac{1}{2}$	5
$\frac{3}{10}$	$\frac{1}{2}$	$\frac{1}{2}$	1 $\frac{1}{2}$	3	

**Approvals:** Standard 248-14, UL Listed and CSA Certified. MITI approved 1 – 5 Amps.

**Dimensions:** 5mm x 20mm (.2 x .79 in.)

For fuses with axial leads, request 238 series. Order 239 series without leads.

Example part number (series & amperage): **239.400**

## 225/224 Series

### 2AG FAST-ACTING FUSE

Fast-acting performance of the 312, 3AG fuses in less than one-third the space. For protection of electronic equipment and appliances.

**Voltage Rating:** 250V:  $\frac{1}{10}$  – 3 $\frac{1}{2}$ A. 125V: 4 – 10A

#### Ampere Ratings:

$\frac{1}{10}$	$\frac{3}{10}$	1	2 $\frac{1}{2}$	4	7
$\frac{1}{5}$	$\frac{1}{2}$	1 $\frac{1}{2}$	3	5	8
$\frac{1}{2}$	$\frac{3}{4}$	2	3 $\frac{1}{2}$	6	10

**Approvals:** Standard 248-14, UL Listed and CSA Certified. 224 series approved by MITI 1 – 5 Amps.

**Dimensions:** 2AG Fuse .177" x .57" (4.5 x 14.5mm)

For fuses with axial leads, request series number 224. Order 225 series without leads.

Example part number (series & amperage): **224.500**

## 229/230 Series

### 2AG SLO-BLO® FUSE

229 series 2AG fuses have time-delay of 313 series 3AG fuses in less than one-third the space. They provide superior protection for inductive loads such as motors, transformers, and solenoids. Use whenever time-delay fuses are indicated.

**Voltage Rating:** 250V:  $\frac{1}{4}$  – 3 $\frac{1}{2}$ A. 125V: 4 – 7A.

#### Ampere Ratings:

$\frac{1}{4}$	$\frac{3}{4}$	1 $\frac{1}{2}$	2 $\frac{1}{2}$	4	6
$\frac{3}{4}$	$\frac{1}{2}$	2	3	5	7
$\frac{1}{2}$	1	2 $\frac{1}{2}$	3 $\frac{1}{2}$		

**Approvals:** Standard 248-14, UL Listed and CSA Certified 1/4 – 3-1/2 Amps. UL Recognized under the Components Program and CSA Recognized under the Component Acceptance Program 4 – 7 Amps.

Example part number (series & amperage): **229.375**





### 272/278 Series FAST-ACTING MICROFUSE

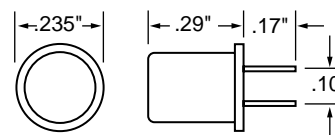
Fast-acting Microfuses for protection of printed circuit boards and similar equipment.

**Voltage Rating:** 125V AC

**Ampere Ratings:**

$\frac{1}{500}$	$\frac{1}{32}$	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{4}$	2
$\frac{1}{200}$	$\frac{1}{20}$	$\frac{3}{10}$	$\frac{1}{2}$	$\frac{5}{8}$	3
$\frac{1}{100}$	$\frac{1}{16}$	$\frac{1}{4}$	$\frac{3}{8}$	1	4
$\frac{1}{64}$	$\frac{1}{10}$	$\frac{3}{10}$	$\frac{1}{2}$	$1\frac{1}{2}$	5

**Approvals:** UL Recognized under the Components Program and CSA Recognized under the Component Acceptance Program. For data on 262 and 268 series High Reliability (Hi-Rel) microfuses, request Electronic Catalog.



**Note:** 278 series has 1" leads  
Example part number (series & amperage): 27201.5



### 273/279 Series FAST-ACTING MICROFUSE

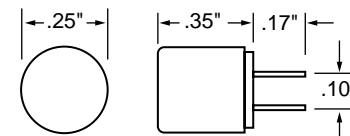
Similar to 272 and 278 series, except has transparent cap for visual indication of fuse status.

**Voltage Rating:** 125V AC

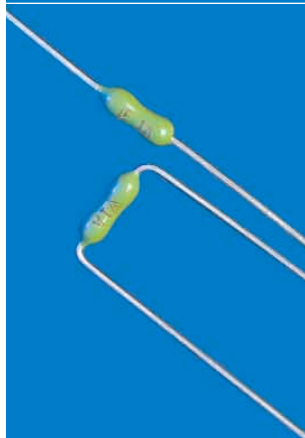
**Ampere Ratings:**

$\frac{1}{500}$	$\frac{1}{32}$	$\frac{1}{8}$	$\frac{4}{10}$	$\frac{3}{4}$	2
$\frac{1}{200}$	$\frac{1}{20}$	$\frac{2}{10}$	$\frac{1}{2}$	$\frac{5}{8}$	3
$\frac{1}{100}$	$\frac{1}{16}$	$\frac{1}{4}$	$\frac{6}{10}$	1	4
$\frac{1}{64}$	$\frac{1}{10}$	$\frac{3}{10}$	$\frac{1}{2}$	$1\frac{1}{2}$	5

**Approvals:** UL Recognized under the Components Program and CSA Recognized under the Component Acceptance Program.



**Note:** 279 series has 1" leads  
Example part number (series & amperage): 273002



### 251/252 Series FAST-ACTING PICO® II FUSE

Subminiature fuse for soldered mounting on printed circuit boards. Available on tape and reel for automatic insertion.

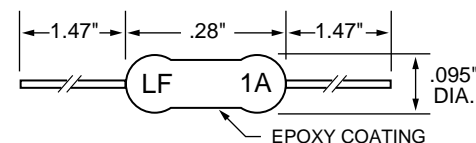
**Voltage Rating:** 125V:  $\frac{1}{16}$  – 10A. 32V: 12 – 15A.

**Ampere Ratings:**

$\frac{1}{16}$	$\frac{3}{8}$	1	$2\frac{1}{2}$	4	10
$\frac{1}{8}$	$\frac{1}{2}$	$1\frac{1}{2}$	3	5	12
$\frac{1}{4}$	$\frac{3}{4}$	2	$3\frac{1}{2}$	7	15

**Approvals:** UL Recognized under the Components Program and CSA Recognized under the Component Acceptance Program.

Example part number (series & amperage): 251.125.



Order 252 series for radial leads. To order PICO II fuses with ampere ratings color-coded, order 255 series for axial leads and 256 for radial leads.

For data on 265 and 266 series High Reliability (Hi-Rel) Pico fuses, request Electronic Catalog. For information on PICO II 250V fast-acting fuses, contact factory.



### 473 Series SLO-BLO® PICO® II FUSE

Subminiature time-delay fuse for soldered mounting on printed circuit boards. Available on tape and reel for automatic insertion. Request bulletin PB-1027 for further information.

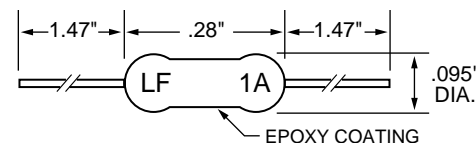
**Voltage Rating:** 125V AC

**Ampere Ratings:**

$\frac{3}{8}$	1	2	$2\frac{1}{2}$	$3\frac{1}{2}$	5
$\frac{1}{2}$	$1\frac{1}{2}$	$2\frac{1}{4}$	3	4	7
$\frac{3}{4}$					

**Approvals:** UL Recognized under the Components Program and CSA Recognized under the Component Acceptance Program. MITI approved 1 – 5 Amp.

Example part number (series & amperage): 473005.







### 307/SFE Series

#### FAST-ACTING FUSE

Low-voltage fuse for automotive and electronic applications.

**Voltage Rating:** 32V AC/DC

**Ampere Ratings/Dimensions:**

Ampere Rating	Length	Diameter
4	$\frac{5}{8}$ "	$\frac{1}{4}$ "
6	$\frac{3}{4}$ "	$\frac{1}{4}$ "
7½	$\frac{7}{8}$ "	$\frac{1}{4}$ "
9	$\frac{7}{8}$ "	$\frac{1}{4}$ "
14	$1\frac{1}{16}$ "	$\frac{1}{4}$ "
20	$1\frac{1}{4}$ "	$\frac{1}{4}$ "
30	$1\frac{7}{16}$ "	$\frac{1}{4}$ "

**Approvals:** UL Listed under UL Standard #275. Society of Automotive Engineers (SAE) J554.

*Example part number (series & amperage):* **307006**



### ATO®/257 Series

#### FAST-ACTING FUSE

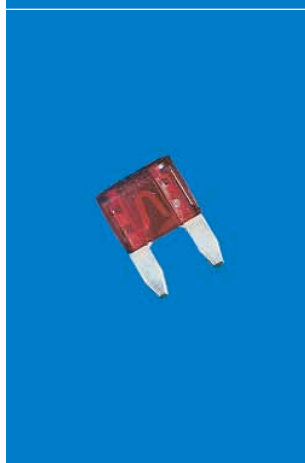
The 257 series ATO fuse is a low-voltage blade type fuse for automotive and electronic applications. Designed, originated and patented by Littelfuse, it has become the standard for OEM circuit protection on foreign and domestic autos and trucks. They are color-coded and readily identifiable and may be specified for a variety of low voltage applications.

**Voltage Rating:** 32V AC/DC

**Approvals:** UL Listed. CSA Certified 3 – 30 A. Society of Automotive Engineers (SAE) J1284.

*Example part number (series & amperage):* **ATO015**

Catalog No.	Amp. Rating	Volt. Rating	Color Code
ATO 001	1	32	Black
ATO 002	2	32	Grey
ATO 003	3	32	Violet
ATO 004	4	32	Pink
ATO 005	5	32	Tan
ATO 07.5	7 1/2	32	Brown
ATO 010	10	32	Red
ATO 015	15	32	Blue
ATO 020	20	32	Yellow
ATO 025	25	32	Natural
ATO 030	30	32	Green
ATO 040	40	32	Orange



### MINI/297 Series

#### MINI® FAST-ACTING FUSE

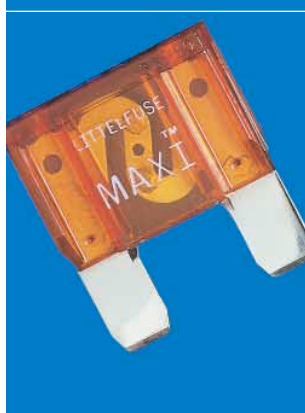
The MINI® fuse is smaller than its predecessor, the ATO® fuse, which permits using more fuses in the same amount of space. More fuses in the same space satisfies the requirement that more circuits be individually fused in newer automobiles. Patented by Littelfuse.

**Voltage Rating:** 32V AC/DC

**Approvals:** UL Listed. Society of Automotive Engineers (SAE) J2077.

*Example part number (series & amperage):* **MIN025**

Catalog No.	Amp. Rating	Volt. Rating	Color Code
MIN 002	2	32	Grey
MIN 003	3	32	Violet
MIN 004	4	32	Pink
MIN 005	5	32	Tan
MIN 07.5	7 1/2	32	Brown
MIN 010	10	32	Red
MIN 015	15	32	Blue
MIN 020	20	32	Yellow
MIN 025	25	32	Natural
MIN 030	30	32	Green



### MAX/299 Series

#### MAXI™ SLO-BLO® FUSE

The patented MAXI™ Fuse is available in a higher range of amperage ratings (20 – 80 amperes) than the ATO® or MINI® fuses, and is physically larger in size. It is color-coded for easy identification. A typical MAXI Fuse application in today's more sophisticated automobile circuits is protection of the wiring harness by replacing the fusible wire or fusible link, which is often a plain piece of small wire.

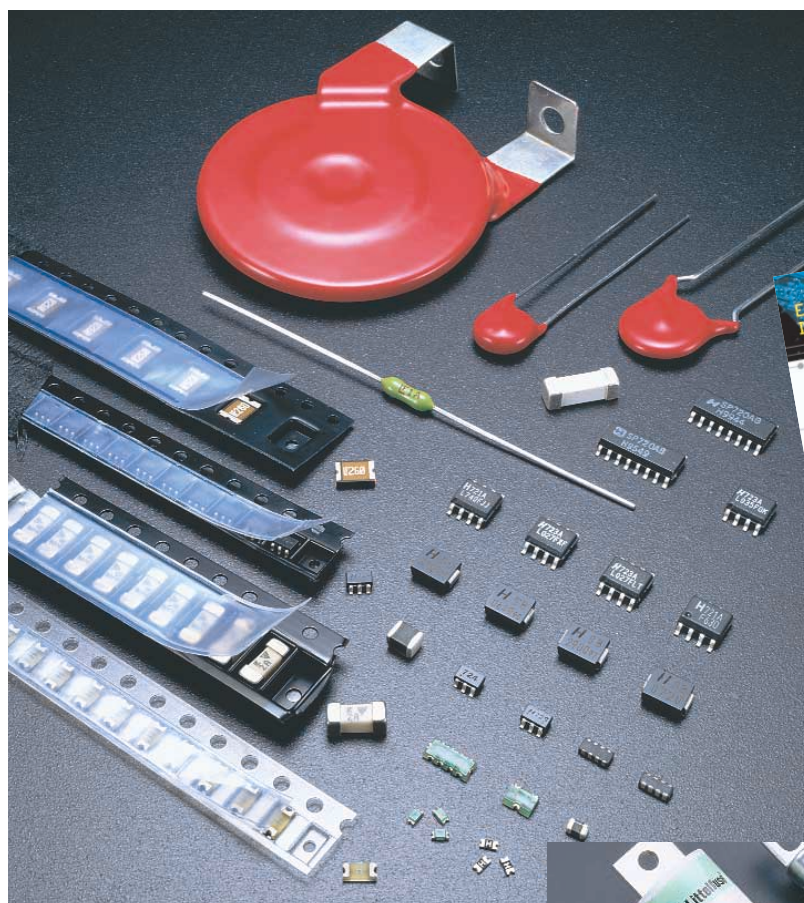
**Voltage Rating:** 32V AC/DC

**Approvals:** UL Listed. Society of Automotive Engineers (SAE) J1888.

*Example part number (series & amperage):* **MAX070**

Catalog No.	Amp. Rating	Volt. Rating	Color Code
MAX 020	20	32	Yellow
MAX 030	30	32	Green
MAX 040	40	32	Orange
MAX 050	50	32	Red
MAX 060	60	32	Blue
MAX 070	70	32	Tan
MAX 080	80	32	Natural





In addition to POWR-GARD Products, Littelfuse manufactures a wide range of state-of-the-art electronic and automotive products. For more detailed information on electronic and automotive products please refer to catalog EC101 and AA101.

