Littelfuse®
Expertise Applied | Answers Delivered

# JLLN/JLLS CLASS T FUSES

300/600 VAC • Fast-Acting • 1-600 Amperes

## Specifications

| | | |
|---|---|---|
| **Voltage Ratings:** | AC: | 300 V (JLLN); 600 V (JLLS) |
| | DC: | 125 V (JLLN 1 – 30 A) |
| | | 160 V (JLLN 35 – 60 A) |
| | | 125 V (JLLN 70 – 100 A) |
| | | 125 V (JLLN 110 – 1200 A) |
| | | 300 V (JLLS) |
| **Interrupting Ratings:** | AC: | 200 kA rms symmetrical |
| | DC: | 20 kA |
| | | (JLLN 70 – 100 A) |
| | | (JLLN 110 – 1200 A) |
| | | (JLLS 1 – 1200 A) |
| **Ampere Range:** | 1 – 1200 A | |
| **Approvals:** | AC: | Standard 248-15, Class T |
| | | UL Listed (File No. E81895): |
| | | JLLN (1-1200 A) |
| | | JLLS (1-800 A) |
| | | UL Recognized (File No. E71611) |
| | | JLLS (900 – 1200 A) |
| | | CSA Certified (File No. LR29862) |
| | | JLLN/JLLS (1 – 600 A) |
| | DC: | UL Listed (File No. E81895): |
| | | JLLN (35 – 1200 A) |
| | | Littelfuse self-certified: |
| | | JLLN (1-30 A) |
| | | JLLS (1 – 1200 A) |

## Description

JLLN/JLLS fuses are less than 1/3 the size of comparable Class R fuses and are typically used for short circuit protection of drives and surge sensitive components. When rated in accordance with the NEC®, JLLN/JLLS fuses provide fast-acting overload and short circuit protection for non-inductive circuits and equipment.

## Applications

- Variable speed drive protection
- Compact mains switches

## Features/Benefits

- Extremely current-limiting
- Compact design
- 200 kA Interrupting Rating
- JLLN Series is RoHS Compliant

## Ordering Information

| AMPERE RATINGS | | | | |
|---|---|---|---|---|
| 1 | 30 | 90 | 250 | 800 |
| 2 | 35 | 100 | 300 | 900* |
| 3 | 40 | 110 | 350 | 1000 |
| 6 | 45 | 125 | 400 | 1100 |
| 10 | 50 | 150 | 450 | 1200 |
| 15 | 60 | 175 | 500 | |
| 20 | 70 | 200 | 600 | |
| 25 | 80 | 225 | 700 | |

*JLLS only
*Note: Contact the factory for RoHS compliant Class T fuses.*

| SERIES | VOLTAGE | AMPERAGE | CATALOG NUMBER | SYSTEM NUMBER |
|---|---|---|---|---|
| JLLS | 600 V | 6 | JLLS006 | JLLS006.T |
| JLLN | 300 V | 10 | JLLN010 | JLLN010.T |

## Web Resources

TC Curves, downloadable CAD drawings and other technical information: **www.littelfuse.com/jlln**
**www.littelfuse.com/jlls**

## Recommended Fuseholders

LFT30 Series
LFT60 Series
LSCR Series for 700-800 A


© JUNE 2011 Littelfuse POWR-GARD Products

# JLLN/JLLS CLASS T FUSES

## Dimensions in inches (mm)

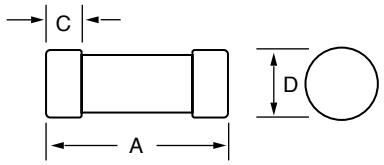



Fig. 1

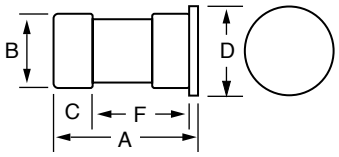



Fig. 2

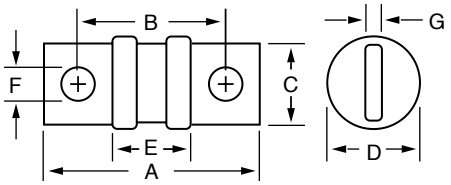



Fig. 3

| AMPERES | REFER TO FIG. NO. | SERIES | DIMENSIONS IN INCHES (mm) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | A | B | C | D | E | F | G |
| 1 – 30 | 1 | JLLN | 7/8 (22.2) | — | 9/32 (7.1) | 13/32 (10.3) | — | — | — |
| | | JLLS | 1 1/2 (38.1) | — | 9/32 (7.1) | 9/16 (14.3) | — | — | — |
| 35 – 60 | 1 | JLLN | 7/8 (22.2) | — | 9/32 (7.1) | 9/16 (14.3) | — | — | — |
| | 2 | JLLS | 1 9/16 (39.7) | 13/16 (20.6) | 13/32 (10.3) | 1 (25.4) | 1/16 (1.6) | 1 3/32 (27.8) | — |
| 70 – 100 | 3 | JLLN | 2 5/32 (54.8) | 1 9/16 (39.7) | 3/4 (19.1) | 13/16 (20.6) | 27/32 (21.4) | 9/32 (7.1) | 1/8 (3.2) |
| | | JLLS | 2 61/64 (75.0) | 2 23/64 (59.9) | 3/4 (19.1) | 13/16 (20.6) | 1 41/64 (41.7) | 9/32 (7.1) | 1/8 (3.2) |
| 110 – 200 | 3 | JLLN | 2 7/16 (61.9) | 1 11/16 (42.9) | 7/8 (22.2) | 1 1/16 (27.0) | 27/32 (21.4) | 11/32 (8.7) | 3/16 (4.8) |
| | | JLLS | 3 1/4 (82.6) | 2 1/2 (63.5) | 7/8 (22.2) | 1 1/16 (27.0) | 1 21/32 (42.1) | 11/32 (8.7) | 3/16 (4.8) |
| 225 – 400 | 3 | JLLN | 2 3/4 (69.9) | 1 27/32 (46.8) | 1 (25.4) | 1 5/16 (33.3) | 53/64 (21.0) | 13/32 (10.3) | 1/4 (6.4) |
| | | JLLS | 3 5/8 (92.1) | 2 23/32 (69.1) | 1 (25.4) | 1 19/32 (40.5) | 1 23/32 (43.7) | 13/32 (10.3) | 1/4 (6.4) |
| 450 – 600 | 3 | JLLN | 3 1/16 (77.8) | 2 1/32 (51.6) | 1 1/4 (31.8) | 1 19/32 (40.5) | 7/8 (22.2) | 31/64 (12.3) | 5/16 (7.9) |
| | | JLLS | 3 63/64 (101.2) | 2 61/64 (75.0) | 1 1/4 (31.8) | 2 1/16 (52.4) | 1 49/64 (44.8) | 31/64 (12.3) | 5/16 (7.9) |
| 700 – 800 | 3 | JLLN | 3 3/8 (85.7) | 2 7/32 (64.3) | 1 3/4 (44.5) | 2 1/16 (52.4) | 7/8 (22.2) | 35/64 (13.9) | 3/8 (9.5) |
| | | JLLS | 4 21/64 (109.9) | 3 11/64 (80.6) | 1 3/4 (44.5) | 2 1/2 (63.5) | 1 55/64 (47.2) | 35/64 (13.9) | 3/8 (9.5) |
| 900 – 1200 | 3 | JLLN | 4 (101.6) | 2 17/32 (64.3) | 2 (50.8) | 2 1/2 (63.5) | 1 1/32 (26.2) | 39/64 (15.5) | 7/16 (11.1) |
| | | JLLS | 5.27 (133.9) | 3.80 (96.5) | 2 (50.8) | 2.63 (66.8) | 2.30 (58.4) | 0.67 (15.5) | 0.44 (11.2) |

## Current-Limiting Effects of JLLN (300 V) fuses

| SHORT CIRCUIT CURRENT* | APPARENT RMS SYMMETRICAL CURRENT FOR VARIOUS FUSE RATINGS | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 30 A | 60 A | 100 A | 200 A | 400 A | 600 A | 800 A | 1200 A |
| **5,000** | 700 | 775 | 1,100 | 1,650 | 3,500 | 4,000 | 5,000 | 5,000 |
| **10,000** | 900 | 1,000 | 1,400 | 2,100 | 4,400 | 5,100 | 6,750 | 8,250 |
| **15,000** | 1,000 | 1,100 | 1,600 | 2,400 | 5,000 | 5,900 | 7,750 | 10,000 |
| **20,000** | 1,100 | 1,250 | 1,800 | 2,700 | 5,500 | 6,500 | 8,750 | 11,000 |
| **25,000** | 1,230 | 1,300 | 1,950 | 2,900 | 6,000 | 7,000 | 9,500 | 12,000 |
| **30,000** | 1,300 | 1,475 | 2,050 | 3,100 | 6,400 | 7,500 | 10,000 | 12,500 |
| **35,000** | 1,330 | 1,575 | 2,150 | 3,300 | 6,750 | 7,750 | 10,500 | 13,500 |
| **40,000** | 1,430 | 1,600 | 2,300 | 3,500 | 7,000 | 8,000 | 11,000 | 14,000 |
| **50,000** | 1,500 | 1,750 | 2,400 | 3,700 | 7,500 | 8,750 | 12,000 | 15,000 |
| **60,000** | 1,700 | 1,900 | 2,700 | 4,000 | 8,000 | 9,500 | 12,500 | 16,000 |
| **80,000** | 1,850 | 2,100 | 2,800 | 4,400 | 9,000 | 10,500 | 14,000 | 17,500 |
| **100,000** | 2,000 | 2,250 | 3,150 | 4,800 | 9,750 | 11,500 | 15,000 | 18,500 |
| **150,000** | 2,300 | 2,600 | 3,600 | 5,500 | 11,000 | 13,000 | 17,500 | 22,000 |
| **200,000** | 2,600 | 2,800 | 3,900 | 6,000 | 12,000 | 14,500 | 19,500 | 24,000 |

*Prospective RMS Symmetrical Amperes Short-Circuit Current
*Note: Data Derived from Peak Let-Thru Curves*

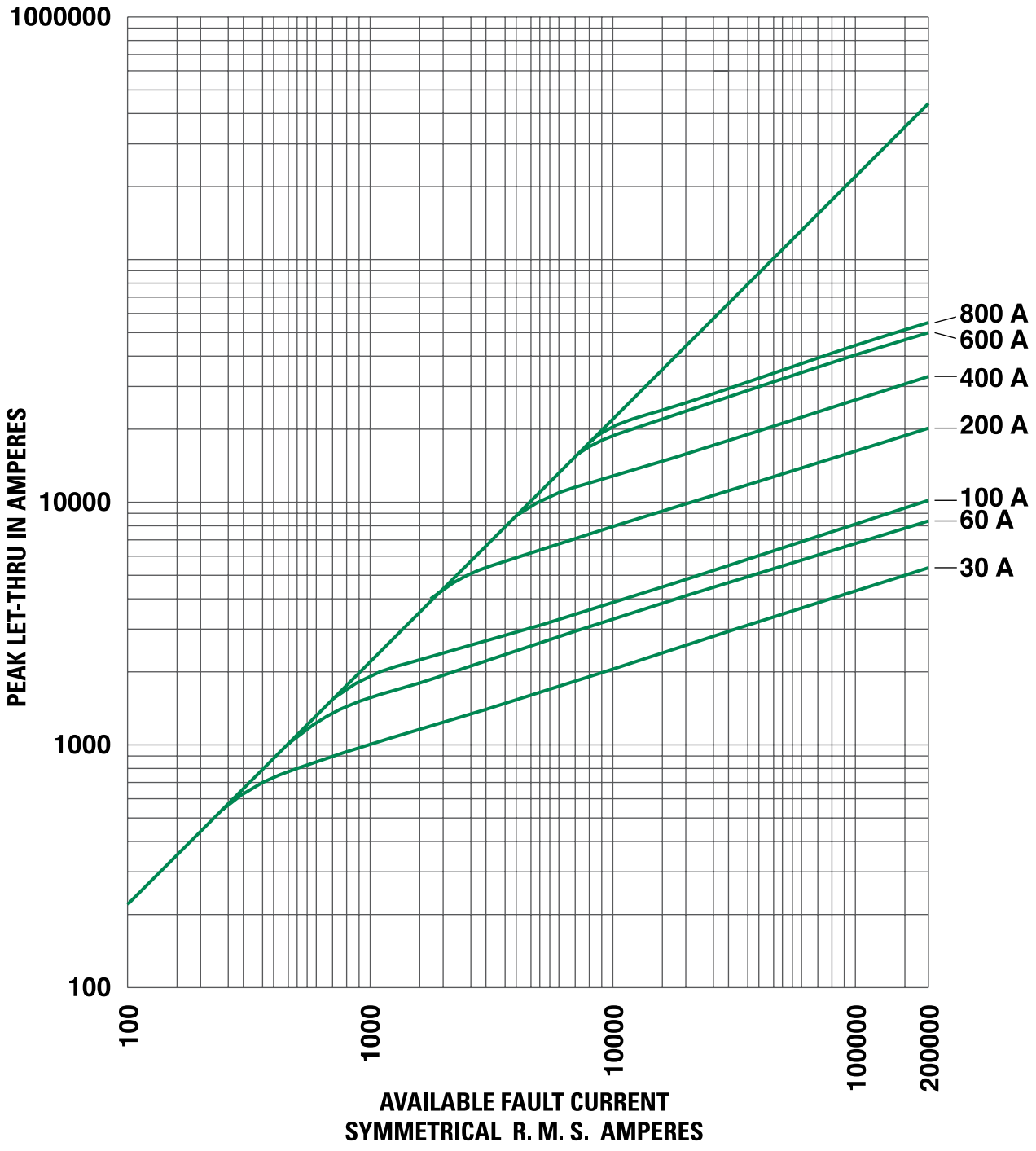
## Current-Limiting Effects of JLLS (600 V) fuses

| SHORT CIRCUIT CURRENT* | APPARENT RMS SYMMETRICAL CURRENT FOR VARIOUS FUSE RATINGS | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 30 A | 60 A | 100 A | 200 A | 400 A | 600 A | 800 A | 1200 A |
| **5,000** | 750 | 1,225 | 1,400 | 2,850 | 4,600 | 5,000 | 5,000 | 5,000 |
| **10,000** | 945 | 1,525 | 1,700 | 3,600 | 6,000 | 8,500 | 9,400 | 10,000 |
| **15,000** | 1,050 | 1,700 | 2,000 | 4,050 | 6,600 | 9,750 | 10,500 | 13,000 |
| **20,000** | 1,150 | 1,900 | 2,200 | 4,450 | 7,250 | 10,500 | 11,000 | 14,750 |
| **25,000** | 1,300 | 2,050 | 2,400 | 4,800 | 8,000 | 11,500 | 12,500 | 15,500 |
| **30,000** | 1,375 | 2,150 | 2,450 | 5,000 | 8,250 | 12,000 | 13,750 | 16,500 |
| **35,000** | 1,400 | 2,250 | 2,600 | 5,100 | 8,500 | 13,000 | 14,000 | 17,000 |
| **40,000** | 1,425 | 2,400 | 2,800 | 5,200 | 8,700 | 14,000 | 14,750 | 18,000 |
| **50,000** | 1,600 | 2,450 | 2,900 | 6,000 | 9,500 | 14,500 | 16,000 | 20,000 |
| **60,000** | 1,650 | 2,625 | 3,100 | 6,250 | 10,000 | 15,500 | 17,300 | 21,000 |
| **80,000** | 1,825 | 2,800 | 3,400 | 7,000 | 11,000 | 17,000 | 18,750 | 23,000 |
| **100,000** | 2,000 | 3,100 | 3,700 | 7,250 | 12,000 | 18,000 | 20,000 | 25,000 |
| **150,000** | 2,250 | 3,400 | 4,300 | 8,500 | 13,000 | 21,000 | 23,000 | 28,500 |
| **200,000** | 2,450 | 3,800 | 4,600 | 9,000 | 15,000 | 23,000 | 25,000 | 31,000 |

*Prospective RMS Symmetrical Amperes Short-Circuit Current
*Note: Data Derived from Peak Let-Thru Curves*


© JUNE 2011 Littelfuse POWR-GARD Products

## Peak Let-Thru Curve JLLS




 © JUNE 2011 Littelfuse POWR-GARD Products

ООО «ЛайфЭлектроникс» “LifeElectronics” LLC

ИНН 7805602321 КПП 780501001 Р/С 40702810122510004610 ФАКБ "АБСОЛЮТ БАНК" (ЗАО) в г.Санкт-Петербурге К/С 30101810900000000703 БИК 044030703

*Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.*

*С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров*

*Мы предлагаем:*

- *Конкурентоспособные цены и скидки постоянным клиентам.*
- *Специальные условия для постоянных клиентов.*
- *Подбор аналогов.*
- *Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.*

- *Приемлемые сроки поставки, возможна ускоренная поставка.*
- *Доставку товара в любую точку России и стран СНГ.*
- *Комплексную поставку.*
- *Работу по проектам и поставку образцов.*
- *Формирование склада под заказчика.*

- *Сертификаты соответствия на поставляемую продукцию (по желанию клиента).*
- *Тестирование поставляемой продукции.*
- *Поставку компонентов, требующих военную и космическую приемку.*
- *Входной контроль качества.*
- *Наличие сертификата ISO.*

*В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.*

*Конструкторский отдел помогает осуществить:*

- *Регистрацию проекта у производителя компонентов.*
- *Техническую поддержку проекта.*
- *Защиту от снятия компонента с производства.*
- *Оценку стоимости проекта по компонентам.*
- *Изготовление тестовой платы монтаж и пусконаладочные работы.*

*Тел: +7 (812) 336 43 04 (многоканальный)*
*Email: org@lifeelectronics.ru*

***www.lifeelectronics.ru***