

# Class T Fuses

## JLLS Series

600 V ac • Fast-Acting • 1–1200 A



### Description

The JLLS series fast-acting fuses are the most compact fuses available in ratings above 30 amperes — less than one-third the size of comparable Class R fuses. The JLLS fuses are used for short-circuit protection of drives and surge-sensitive components. When rated in accordance with the NEC, these fuses provide fast-acting overload and short-circuit protection for non-inductive circuits and equipment. Main switches containing JLLS fuses can be used to provide compact protection for meter stacks. It should be noted that molded case circuit breaker load centers and panelboards have increased interrupting ratings when “series rated” with Littelfuse Class T fuses. JLLS fuses are available in non-plated and silver plated terminations.

### Features & Benefits

| FEATURES                     | BENEFITS                                                                                                                                                        |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>200,000 AIR</b>           | Safety feature providing reliable interruption of all overcurrents up to 200,000 A                                                                              |
| <b>Current-limiting</b>      | Reduces damage caused by heating and magnetic effects of short-circuit currents; extends the equipment's lifecycle                                              |
| <b>Fast-acting</b>           | Provides fast short-circuit response for equipment requiring fast overload protection                                                                           |
| <b>POWR-GARD® technology</b> | Ensures quality overcurrent protection                                                                                                                          |
| <b>Compact size</b>          | More efficient use of available space — typical three-pole Class T fuse blocks require less than 50% of the panel area required for Class R fuse blocks         |
| <b>Functional protection</b> | When used as input or output fuses for surge-sensitive components, they can prevent opening of expensive semiconductor fuses that protect individual components |

### Applications

- Variable speed drives
- Power conversion devices (inverters, rectifiers, UPS)
- Power supplies and power distribution units
- Compact main switches
- Individual electric services and meters

# Class T Fuses

## JLLS Series

### Specifications

|                             |                                                                                                                    |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------|
| <b>Voltage Ratings</b>      | Ac: 600 V<br>Dc: 300 V                                                                                             |
| <b>Ampere Range</b>         | 1–1200 A                                                                                                           |
| <b>Interrupting Rating</b>  | Ac: 200 kA rms symmetrical<br>Dc: 20 kA Littelfuse self-certified                                                  |
| <b>Material</b>             | 1–30 A: melamine body, copper caps<br>35–60 A: melamine body, bronze caps<br>70–1200 A: melamine body, copper caps |
| <b>Applicable Standards</b> | UL 248-15, Class T                                                                                                 |
| <b>Environmental</b>        | RoHS Compliant                                                                                                     |
| <b>Country of Origin</b>    | Mexico                                                                                                             |

### Certification & Compliance

|             |                                                      |
|-------------|------------------------------------------------------|
| <b>UL</b>   | UL Listed (File: E81895)                             |
| <b>CSA</b>  | CSA Certified (File: LR29862)                        |
| <b>CE</b>   | Declaration of Conformity: EU_DOC-JLLS_210701        |
| <b>RoHS</b> | RoHS 2 Directive 2011/65/EU; Directive (EU) 2015/863 |

### Accessories

LFT60 series fuse holder  
LSCR series fuse holder for 70–800 amperes

### Ordering Information

| AMPERE | UNPLATED       |                 |               |                 |             | PLATED         |                 |               |                 |             |
|--------|----------------|-----------------|---------------|-----------------|-------------|----------------|-----------------|---------------|-----------------|-------------|
|        | CATALOG NUMBER | PRODUCT MARKING | PACK QUANTITY | ORDERING NUMBER | UPC         | CATALOG NUMBER | PRODUCT MARKING | PACK QUANTITY | ORDERING NUMBER | UPC         |
| 1      | JLLS001        | JLLS 1A         | 10            | JLLS001.T       | 07945819031 | JLLS001P       | JLLS 1A-P       | 10            | JLLS001.TXP     | 07945882156 |
| 2      | JLLS002        | JLLS 2A         | 10            | JLLS002.T       | 07945819041 | JLLS002P       | JLLS 2A-P       | 10            | JLLS002.TXP     | 07945882157 |
| 3      | JLLS003        | JLLS 3A         | 10            | JLLS003.T       | 07945819047 | JLLS003P       | JLLS 3A-P       | 10            | JLLS003.TXP     | 07945882158 |
| 6      | JLLS006        | JLLS 6A         | 10            | JLLS006.T       | 07945819058 | JLLS006P       | JLLS 6A-P       | 10            | JLLS006.TXP     | 07945882159 |
| 10     | JLLS010        | JLLS 10A        | 10            | JLLS010.T       | 07945819065 | JLLS010P       | JLLS 10A-P      | 10            | JLLS010.TXP     | 07945882160 |
| 15     | JLLS015        | JLLS 15A        | 10            | JLLS015.T       | 07945819068 | JLLS015P       | JLLS 15A-P      | 10            | JLLS015.TXP     | 07945882161 |
| 20     | JLLS020        | JLLS 20A        | 10            | JLLS020.T       | 07945819071 | JLLS020P       | JLLS 20A-P      | 10            | JLLS020.TXP     | 07945882162 |
| 25     | JLLS025        | JLLS 25A        | 10            | JLLS025.T       | 07945819072 | JLLS025P       | JLLS 25A-P      | 10            | JLLS025.TXP     | 07945882163 |
| 30     | JLLS030        | JLLS 30A        | 10            | JLLS030.T       | 07945819073 | JLLS030P       | JLLS 30A-P      | 10            | JLLS030.TXP     | 07945882164 |
| 35     | JLLS035        | JLLS 35A        | 10            | JLLS035.T       | 07945819074 | JLLS035P       | JLLS 35A-P      | 10            | JLLS035.TXP     | 07945882165 |
| 40     | JLLS040        | JLLS 40A        | 10            | JLLS040.T       | 07945819075 | JLLS040P       | JLLS 40A-P      | 10            | JLLS040.TXP     | 07945882166 |
| 45     | JLLS045        | JLLS 45A        | 10            | JLLS045.T       | 07945819076 | JLLS045P       | JLLS 45A-P      | 10            | JLLS045.TXP     | 07945882167 |
| 50     | JLLS050        | JLLS 50A        | 10            | JLLS050.T       | 07945819077 | JLLS050P       | JLLS 50A-P      | 10            | JLLS050.TXP     | 07945882168 |
| 60     | JLLS060        | JLLS 60A        | 10            | JLLS060.T       | 07945819078 | JLLS060P       | JLLS 60A-P      | 10            | JLLS060.TXP     | 07945882169 |
| 70     | JLLS070        | JLLS 70A        | 5             | JLLS070.V       | 07945819079 | JLLS070P       | JLLS 70A-P      | 5             | JLLS070.VXP     | 07945882170 |
| 80     | JLLS080        | JLLS 80A        | 5             | JLLS080.V       | 07945819080 | JLLS080P       | JLLS 80A-P      | 5             | JLLS080.VXP     | 07945882171 |
| 90     | JLLS090        | JLLS 90A        | 5             | JLLS090.V       | 07945819081 | JLLS090P       | JLLS 90A-P      | 5             | JLLS090.VXP     | 07945882172 |
| 100    | JLLS100        | JLLS 100A       | 5             | JLLS100.V       | 07945819082 | JLLS100P       | JLLS 100A-P     | 5             | JLLS100.VXP     | 07945882173 |

# Class T Fuses

## JLLS Series

### Ordering Information

| AMPERE | UNPLATED       |                 |               |                 |             | PLATED         |                 |               |                 |             |
|--------|----------------|-----------------|---------------|-----------------|-------------|----------------|-----------------|---------------|-----------------|-------------|
|        | CATALOG NUMBER | PRODUCT MARKING | PACK QUANTITY | ORDERING NUMBER | UPC         | CATALOG NUMBER | PRODUCT MARKING | PACK QUANTITY | ORDERING NUMBER | UPC         |
| 110    | JLLS110        | JLLS 110A       | 1             | JLLS110.X       | 07945819083 | JLLS110P       | JLLS 110A-P     | 1             | JLLS110.XXP     | 07945882175 |
| 125    | JLLS125        | JLLS 125A       | 1             | JLLS125.X       | 07945819084 | JLLS125P       | JLLS 125A-P     | 1             | JLLS125.XXP     | 07945882178 |
| 150    | JLLS150        | JLLS 150A       | 1             | JLLS150.X       | 07945819086 | JLLS150P       | JLLS 150A-P     | 1             | JLLS150.XXP     | 07945882179 |
| 175    | JLLS175        | JLLS 175A       | 1             | JLLS175.X       | 07945819087 | JLLS175P       | JLLS 175A-P     | 1             | JLLS175.XXP     | 07945882180 |
| 200    | JLLS200        | JLLS 200A       | 1             | JLLS200.X       | 07945819088 | JLLS200P       | JLLS 200A-P     | 1             | JLLS200.XXP     | 07945882182 |
| 225    | JLLS225        | JLLS 225A       | 1             | JLLS225.X       | 07945819089 | JLLS225P       | JLLS 225A-P     | 1             | JLLS225.XXP     | 07945882183 |
| 250    | JLLS250        | JLLS 250A       | 1             | JLLS250.X       | 07945819090 | JLLS250P       | JLLS 250A-P     | 1             | JLLS250.XXP     | 07945882184 |
| 300    | JLLS300        | JLLS 300A       | 1             | JLLS300.X       | 07945819091 | JLLS300P       | JLLS 300A-P     | 1             | JLLS300.XXP     | 07945882185 |
| 350    | JLLS350        | JLLS 350A       | 1             | JLLS350.X       | 07945819092 | JLLS350P       | JLLS 350A-P     | 1             | JLLS350.XXP     | 07945882186 |
| 400    | JLLS400        | JLLS 400A       | 1             | JLLS400.X       | 07945819093 | JLLS400P       | JLLS 400A-P     | 1             | JLLS400.XXP     | 07945882187 |
| 450    | JLLS450        | JLLS 450A       | 1             | JLLS450.X       | 07945819095 | JLLS450P       | JLLS 450A-P     | 1             | JLLS450.XXP     | 07945882188 |
| 500    | JLLS500        | JLLS 500A       | 1             | JLLS500.X       | 07945819096 | JLLS500P       | JLLS 500A-P     | 1             | JLLS500.XXP     | 07945882189 |
| 600    | JLLS600        | JLLS 600A       | 1             | JLLS600.X       | 07945819098 | JLLS600P       | JLLS 600A-P     | 1             | JLLS600.XXP     | 07945882190 |
| 700    | JLLS700        | JLLS 700A       | 1             | JLLS700.X       | 07945805363 | JLLS700P       | JLLS 700A-P     | 1             | JLLS700.XXP     | 07945882191 |
| 800    | JLLS800        | JLLS 800A       | 1             | JLLS800.X       | 07945819103 | JLLS800P       | JLLS 800A-P     | 1             | JLLS800.XXP     | 07945882192 |
| 900    | JLLS900        | JLLS 900A       | 1             | JLLS900.X       | 07945801059 | JLLS900P       | JLLS 900A-P     | 1             | JLLS900.XXP     | 07945882193 |
| 1000   | JLLS1000       | JLLS 1000A      | 1             | JLLS1000X       | 07945801060 | JLLS1000XP     | JLLS 1000A-P    | 1             | JLLS1000XXP     | 07945882174 |
| 1100   | JLLS1100       | JLLS 1100A      | 1             | JLLS1100X       | 07945801061 | JLLS1100XP     | JLLS 1100A-P    | 1             | JLLS1100XXP     | 07945882176 |
| 1200   | JLLS1200       | JLLS 1200A      | 1             | JLLS1200X       | 07945801062 | JLLS1200XP     | JLLS 1200A-P    | 1             | JLLS1200XXP     | 07945882177 |

### Dimensions

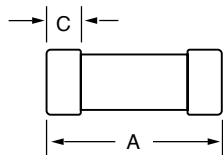


Fig. 1

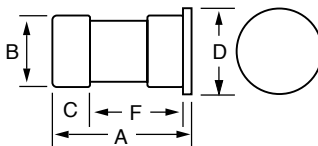


Fig. 2

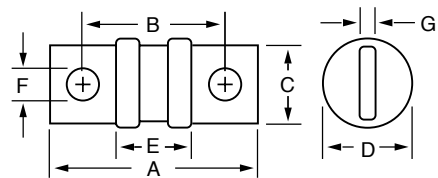


Fig. 3

| AMPERAGE | REFER TO FIG. NO. | DIMENSIONS INCHES (MM) |              |              |              |              |              |             |
|----------|-------------------|------------------------|--------------|--------------|--------------|--------------|--------------|-------------|
|          |                   | A                      | B            | C            | D            | E            | F            | G           |
| 1-30     | 1                 | 1.500 (38.1)           | —            | .281 (7.1)   | .562 (14.3)  | —            | —            | —           |
| 35-60    | 2                 | 1.562 (39.7)           | .812 (20.6)  | .406 (10.3)  | .994 (25.2)  | .062 (1.6)   | 1.094 (27.8) | —           |
| 70-100   | 3                 | 2.953 (75.0)           | 2.352 (59.7) | .750 (19.1)  | .828 (21.0)  | 1.625 (41.3) | .281 (7.1)   | .125 (3.2)  |
| 110-200  | 3                 | 3.250 (82.6)           | 2.507 (63.7) | .875 (22.2)  | 1.078 (27.4) | 1.656 (42.1) | .343 (8.7)   | .187 (4.8)  |
| 225-400  | 3                 | 3.625 (92.1)           | 2.718 (69.1) | 1.000 (25.4) | 1.593 (40.5) | 1.712 (43.5) | .406 (10.3)  | .250 (6.4)  |
| 450-600  | 3                 | 3.984 (101.2)          | 2.953 (75.0) | 1.250 (31.8) | 2.062 (52.4) | 1.765 (44.8) | .484 (12.3)  | .312 (7.9)  |
| 700-800  | 3                 | 4.328 (109.9)          | 3.171 (80.6) | 1.750 (44.5) | 2.500 (63.5) | 1.860 (47.2) | .546 (13.9)  | .375 (9.5)  |
| 900-1200 | 3                 | 5.271 (133.9)          | 3.801 (96.5) | 2.000 (50.8) | 2.625 (66.7) | 2.303 (58.5) | .609 (15.5)  | .437 (11.1) |

# Class T Fuses

## JLLS Series

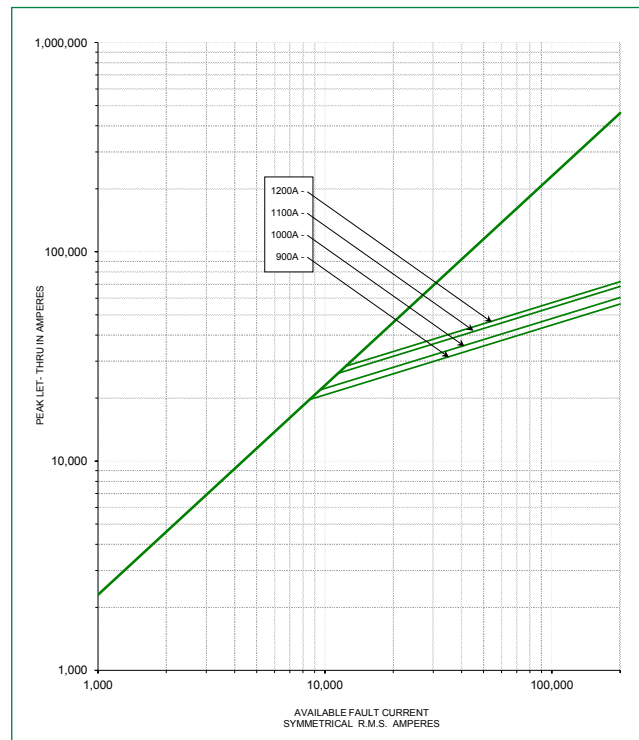
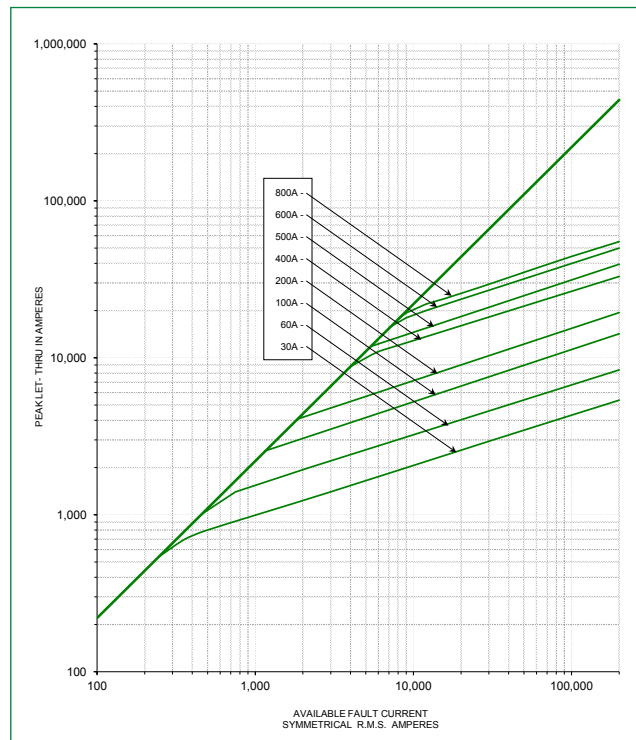
### Current-Limiting Effects

| SHORT<br>CIRCUIT<br>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 | 1,810 | 2,500 | 4,600  | 5,000  | 5,000  | 5,000  |
| 10,000                       | 945                                                       | 1,525 | 2,300 | 3,150 | 6,000  | 8,500  | 9,400  | 10,000 |
| 15,000                       | 1,050                                                     | 1,700 | 2,610 | 3,600 | 6,600  | 9,750  | 10,500 | 13,000 |
| 20,000                       | 1,150                                                     | 1,900 | 2,900 | 3,950 | 7,250  | 10,500 | 11,000 | 14,750 |
| 25,000                       | 1,300                                                     | 2,050 | 3,100 | 4,250 | 8,000  | 11,500 | 12,500 | 15,500 |
| 30,000                       | 1,375                                                     | 2,150 | 3,300 | 4,500 | 8,250  | 12,000 | 13,750 | 16,500 |
| 35,000                       | 1,400                                                     | 2,250 | 3,500 | 4,750 | 8,500  | 13,000 | 14,000 | 17,000 |
| 40,000                       | 1,425                                                     | 2,400 | 3,650 | 4,950 | 8,700  | 14,000 | 14,750 | 18,000 |
| 50,000                       | 1,600                                                     | 2,450 | 3,900 | 5,350 | 9,500  | 14,500 | 16,000 | 20,000 |
| 60,000                       | 1,650                                                     | 2,625 | 4,150 | 5,650 | 10,000 | 15,500 | 17,300 | 21,000 |
| 80,000                       | 1,825                                                     | 2,800 | 4,570 | 6,250 | 11,000 | 17,000 | 18,750 | 23,000 |
| 100,000                      | 2,000                                                     | 3,100 | 4,950 | 6,700 | 12,000 | 18,000 | 20,000 | 25,000 |
| 150,000                      | 2,250                                                     | 3,400 | 5,650 | 7,700 | 13,000 | 21,000 | 23,000 | 28,500 |
| 200,000                      | 2,450                                                     | 3,800 | 6,200 | 8,450 | 15,000 | 23,000 | 25,000 | 31,000 |

\*Prospective RMS Symmetrical Amperes Short-Circuit Current

Note: Data Derived from Peak Let-Thru Curve

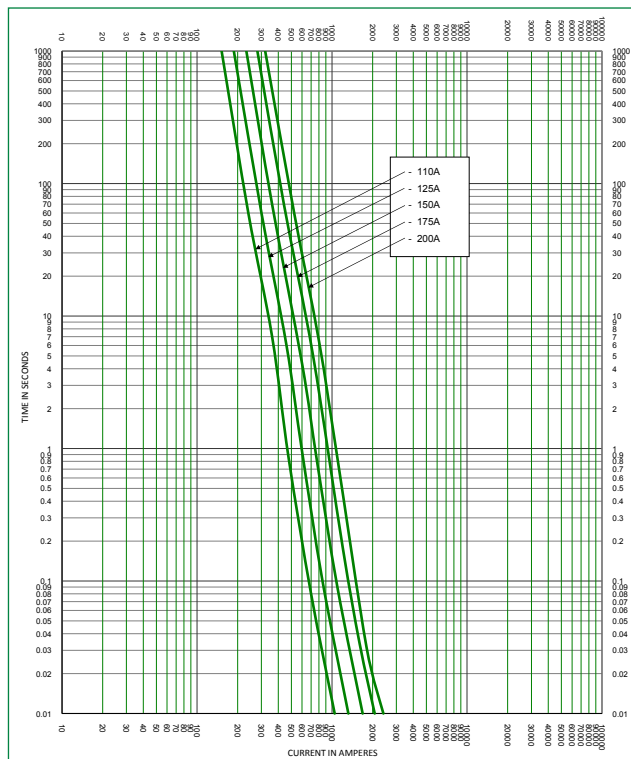
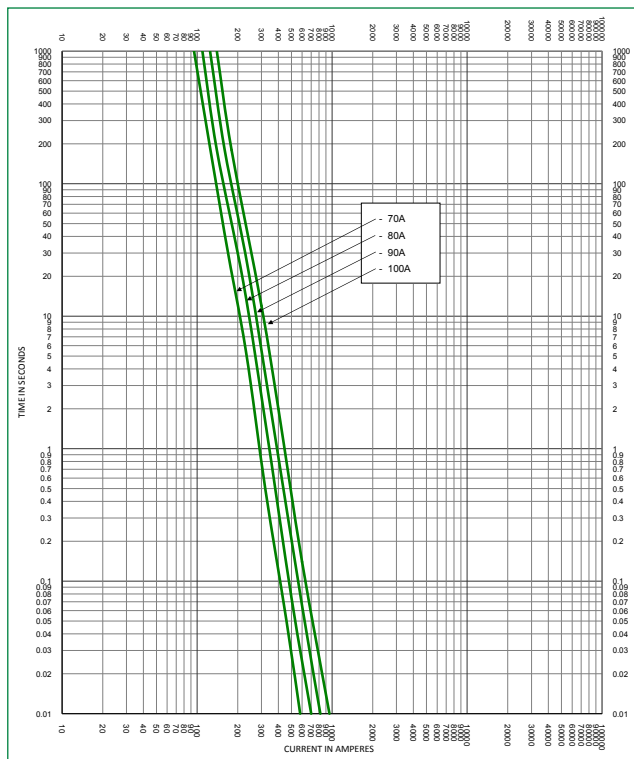
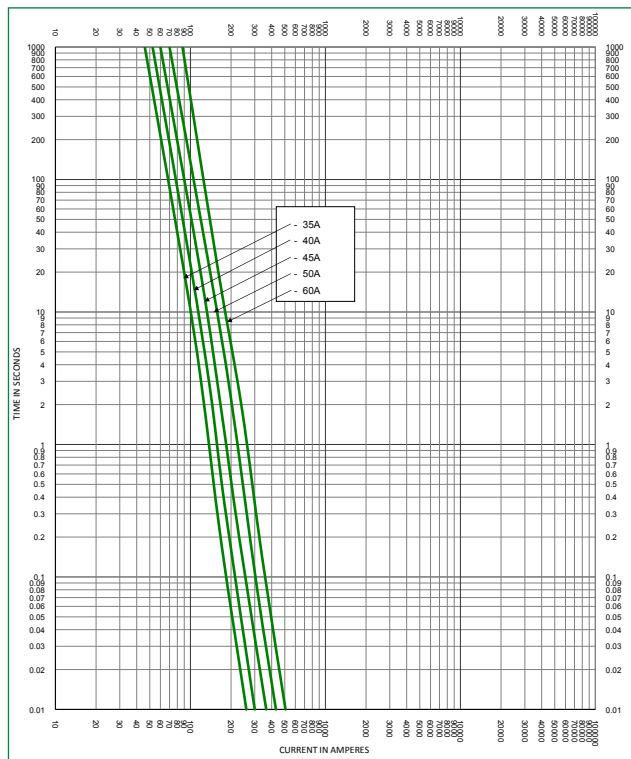
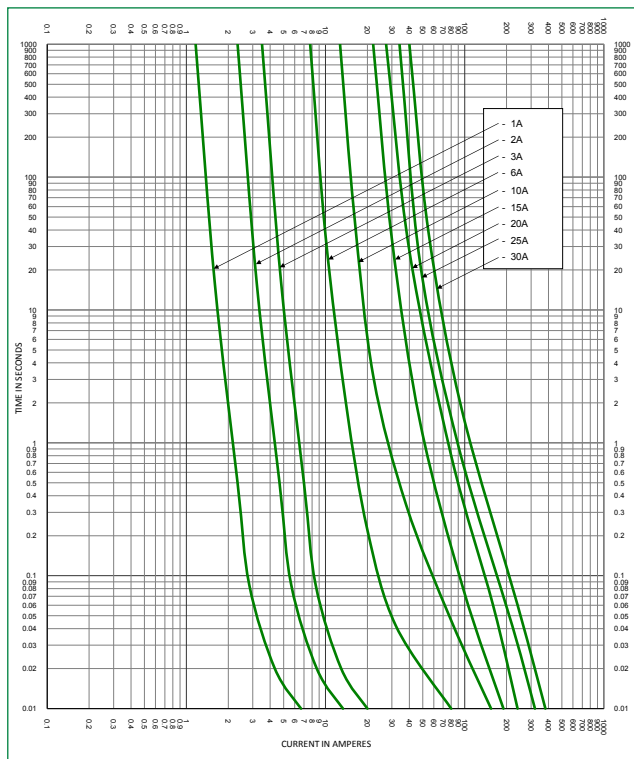
### Peak Let-Thru Curves



# Class T Fuses

## JLLS Series

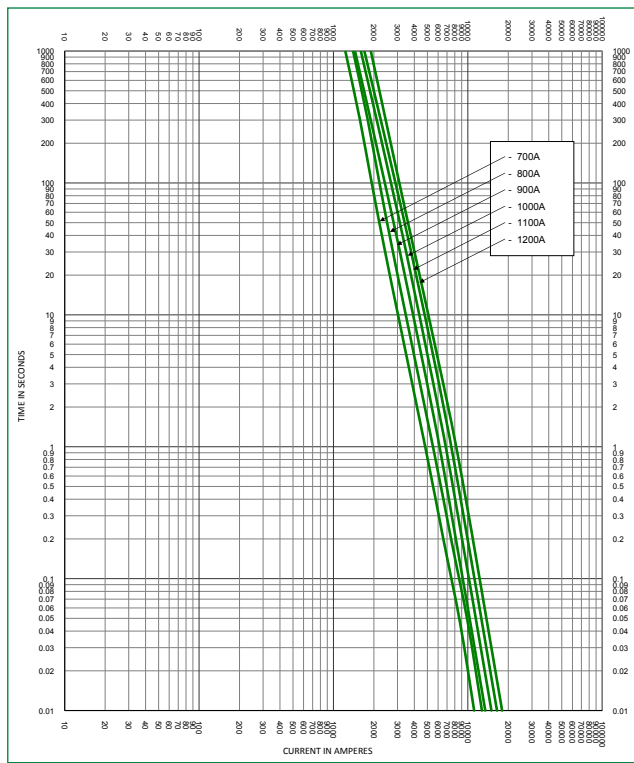
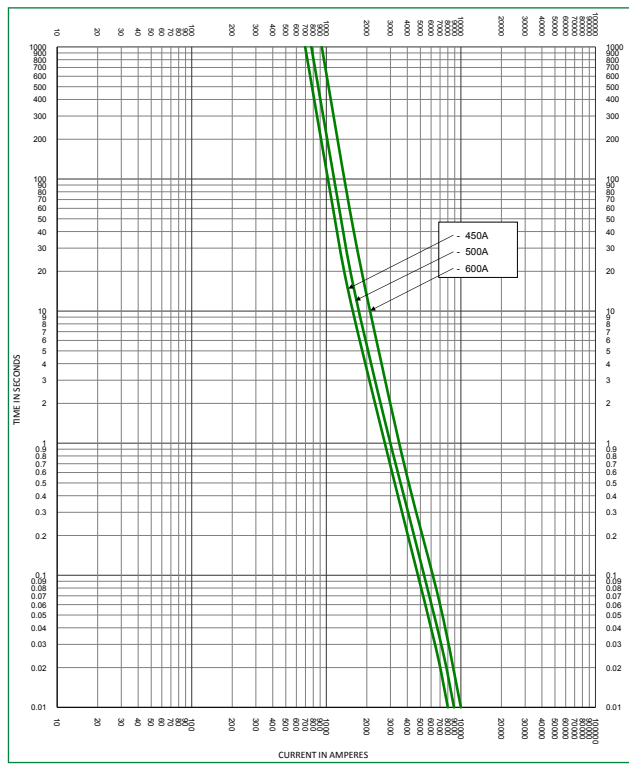
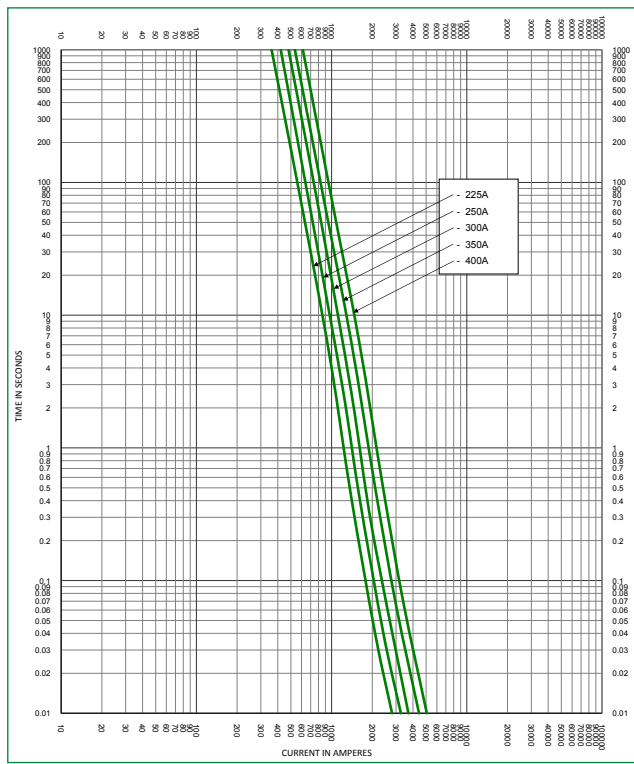
### Time Current Curves



# Class T Fuses

## JLLS Series

### Time Current Curves



**Disclaimer Notice** – Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability of and test each product selected for their own applications. Littelfuse products are not designed for, and may not be used in, all applications. Read complete Disclaimer Notice at [www.littelfuse.com/product-disclaimer](http://www.littelfuse.com/product-disclaimer).