



# 5 DC Power Fuses

This section presents complete electrical specifications for Littelfuse's Telecom DC power fuses.

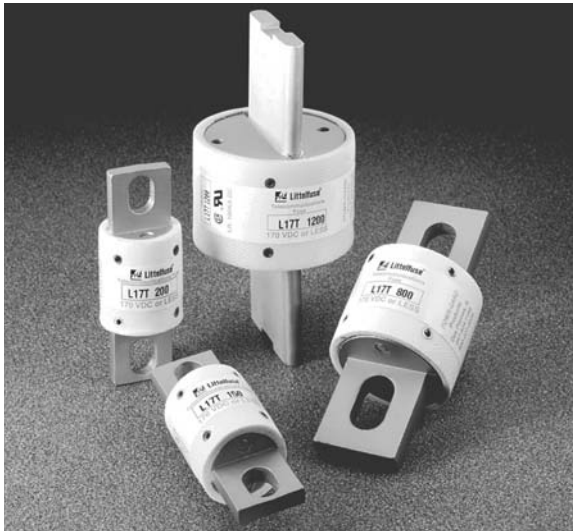
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*Note:* For information about the alarm indicating fuse, refer to "481 Series Alarm Indicating Fuse" on page 4-19.

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## L17T Series Telecommunications Power Fuse



Specifically designed for short circuit protection of telecom circuits, Littelfuse L17T Series fuses provide reliable protection of sensitive DC power distribution systems. Constructed with silver-plated elements for low  $I^2t$  and peak let-through, these advanced fuses virtually eliminate equipment damage due to surges and spikes. The L17T Series fuse's unique element geometry also provides cooler running temperatures, helping to minimize heat within enclosures.

Specifications and features include:

- Low  $I^2t$
- Extremely current limiting
- Low operating temperature

Recommended fuse blocks for the L17T Series fuse are the LTFD6001 and LTFD1200 Series.

### Electrical Parameters

| Part Number | Voltage Rating<br>V DC | Interrupting<br>Rating in Amps | Current Rating<br>Amps | Competitor A<br>Part Number | Competitor B<br>Part Number |
|-------------|------------------------|--------------------------------|------------------------|-----------------------------|-----------------------------|
| L17T 70     | 170                    | 100,000                        | 70                     | TPL-BA                      | TGL-BA                      |
| L17T 90     | 170                    | 100,000                        | 90                     | TPL-BC                      | TGL-BC                      |
| L17T 100    | 170                    | 100,000                        | 100                    | TPL-BD                      | TGL-BD                      |
| L17T 125    | 170                    | 100,000                        | 125                    | TPL-BE                      | TGL-BE                      |
| L17T 150    | 170                    | 100,000                        | 150                    | TPL-BF                      | TGL-BF                      |
| L17T 175    | 170                    | 100,000                        | 175                    | TPL-BG                      | TGL-BG                      |
| L17T 200    | 170                    | 100,000                        | 200                    | TPL-BH                      | TGL-BH                      |
| L17T 225    | 170                    | 100,000                        | 225                    | TPL-BK                      | TGL-BK                      |
| L17T 250    | 170                    | 100,000                        | 250                    | TPL-BL                      | TGL-BL                      |
| L17T 300    | 170                    | 100,000                        | 300                    | TPL-CN                      | TGL-CN                      |
| L17T 350    | 170                    | 100,000                        | 350                    | TPL-CO                      | TGL-CO                      |
| L17T 400    | 170                    | 100,000                        | 400                    | TPL-CR                      | TGL-CR                      |
| L17T 450    | 170                    | 100,000                        | 450                    | TPL-CU                      | TGL-CU                      |
| L17T 500    | 170                    | 100,000                        | 500                    | TPL-CV                      | TGL-CV                      |
| L17T 600    | 170                    | 100,000                        | 600                    | TPL-CZ                      | TGL-CZ                      |
| L17T 800    | 170                    | 100,000                        | 800                    | TPL-CZH                     | TGL-CZH                     |
| L17T 900    | 170                    | 100,000                        | 900                    | —                           | —                           |
| L17T 1000   | 170                    | 100,000                        | 1000                   | —                           | —                           |
| L17T 1100   | 170                    | 100,000                        | 1100                   | —                           | —                           |
| L17T 1200   | 170                    | 100,000                        | 1200                   | —                           | —                           |

## TLN Series Telecommunications Power Fuse



TLN Series fuses are specifically designed for the protection of telecommunications DC power distribution circuits. Fast-acting and current limiting, they are similar in dimension to 250 V Class R fuses.

The recommended fuse block for the TLN Series fuse is the LR250 Series.

### Electrical Parameters

| Part Number | Voltage Rating<br>V DC | Current Rating<br>Amps | Interrupting<br>Rating<br>Amps |
|-------------|------------------------|------------------------|--------------------------------|
| TLN 1       | 170                    | 1                      | 100,000                        |
| TLN 3       | 170                    | 3                      | 100,000                        |
| TLN 5       | 170                    | 5                      | 100,000                        |
| TLN 6       | 170                    | 6                      | 100,000                        |
| TLN 10      | 170                    | 10                     | 100,000                        |
| TLN 15      | 170                    | 15                     | 100,000                        |
| TLN 20      | 170                    | 20                     | 100,000                        |
| TLN 25      | 170                    | 25                     | 100,000                        |
| TLN 30      | 170                    | 30                     | 100,000                        |
| TLN 35      | 170                    | 35                     | 100,000                        |
| TLN 40      | 170                    | 40                     | 100,000                        |
| TLN 45      | 170                    | 45                     | 100,000                        |
| TLN 50      | 170                    | 50                     | 100,000                        |
| TLN 60      | 170                    | 60                     | 100,000                        |
| TLN 70      | 170                    | 70                     | 100,000                        |
| TLN 80      | 170                    | 80                     | 100,000                        |
| TLN 90      | 170                    | 90                     | 100,000                        |
| TLN 100     | 170                    | 100                    | 100,000                        |
| TLN 110     | 170                    | 110                    | 100,000                        |
| TLN 125     | 170                    | 125                    | 100,000                        |
| TLN 150     | 170                    | 150                    | 100,000                        |
| TLN 175     | 170                    | 175                    | 100,000                        |
| TLN 200     | 170                    | 200                    | 100,000                        |
| TLN 225     | 170                    | 225                    | 100,000                        |
| TLN 250     | 170                    | 250                    | 100,000                        |
| TLN 300     | 170                    | 300                    | 100,000                        |
| TLN 350     | 170                    | 350                    | 100,000                        |
| TLN 400     | 170                    | 400                    | 100,000                        |
| TLN 450     | 170                    | 450                    | 100,000                        |
| TLN 500     | 170                    | 500                    | 100,000                        |
| TLN 600     | 170                    | 600                    | 100,000                        |

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## TLS Series Telecommunications Power Fuse



TLS Series fuses are designed specifically for the protection of telecommunications equipment. TLS fuses are engineered to operate up to 170 V dc to provide current limiting short circuit protection for cables and components found in the DC power distribution circuits of telecom systems. The compact design of the TLS provides superior protection and high power density in an extremely compact package.

The body is constructed of glass melamine. The caps are made of silver-plated brass. Multiple mounting configurations are available.

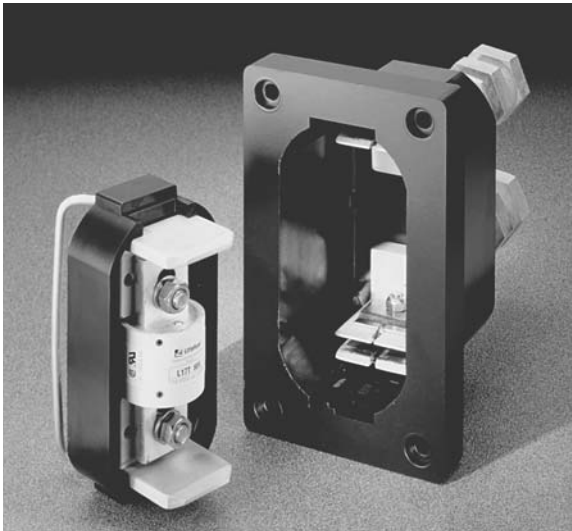
The recommended fuse block for the TLS Series fuse is the LTFD Series disconnect switch.

### Electrical Parameters

| Part Number | Leaded Version Part Number * | Voltage Rating V DC | Current Rating Amps | Interrupting Rating Amps |
|-------------|------------------------------|---------------------|---------------------|--------------------------|
| TLS001      | TLS001L                      | 170                 | 1                   | 100,000                  |
| TLS003      | TLS003L                      | 170                 | 3                   | 100,000                  |
| TLS005      | TLS005L                      | 170                 | 5                   | 100,000                  |
| TLS006      | TLS006L                      | 170                 | 6                   | 100,000                  |
| TLS010      | TLS010L                      | 170                 | 10                  | 100,000                  |
| TLS015      | TLS015L                      | 170                 | 15                  | 100,000                  |
| TLS020      | TLS020L                      | 170                 | 20                  | 100,000                  |
| TLS025      | TLS025L                      | 170                 | 25                  | 100,000                  |
| TLS030      | TLS030L                      | 170                 | 30                  | 100,000                  |
| TLS035      | TLS035L                      | 170                 | 35                  | 100,000                  |
| TLS040      | TLS040L                      | 170                 | 40                  | 100,000                  |
| TLS050      | TLS050L                      | 170                 | 50                  | 100,000                  |
| TLS060      | TLS060L                      | 170                 | 60                  | 100,000                  |
| TLS070      | TLS070                       | 170                 | 70                  | 100,000                  |
| TLS080      | TLS080L                      | 170                 | 80                  | 100,000                  |
| TLS090      | TLS090L                      | 170                 | 90                  | 100,000                  |
| TLS100      | TLS100L                      | 170                 | 100                 | 100,000                  |
| TLS125      | TLS125L                      | 170                 | 125                 | 100,000                  |

\* Used for circuit board applications

## LTFD Series Telecommunications Disconnect Switch



Littelfuse's compact LTFD Series holders are designed for use as a combination fuseholder and disconnect switch for telecommunications equipment. The rugged unit uses a pull-out fuse carrier to safely disconnect power and to provide easy fuse replacement.

Other features include:

- Thermoplastic housing material
- Alarm signaling circuit

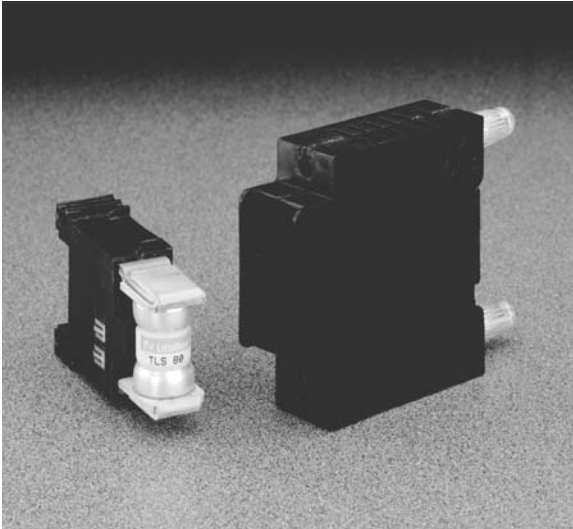
The LTFD Series holders are recommended for use with the L17T Series fuses.

### Electrical Parameters

| Part Number  | Voltage Rating<br>V DC | Current Rating<br>Amps | Contact Nut<br>Maximum Torque |
|--------------|------------------------|------------------------|-------------------------------|
| LTFD6001-00  | 145                    | 70–600                 | 100 feet-pound                |
| LTFD6001-01  | 145                    | 70–800                 | 100 feet-pound                |
| LTFD1200-01  | 60                     | 900–1200               | 100 feet-pound                |
| LTFD1200-01A | 60                     | 900–1200               | 100 feet-pound                |

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## LTFD 101 Series Telecommunications Disconnect Switch



Littelfuse's compact LTFD 101 fuseholders are designed for quick installation into telecom equipment panels. The modular design fits into spaces originally designed for circuit breakers; they can be front panel mounted or rear mounted using bullet connectors.

It is extremely compact and replaces circuit breakers.

The innovative new pull-out design eliminates the need for tools to replace fuses and includes an alarm signaling circuit to identify the blown fuse.

The LTFD 101 Series holders are recommended for use with the TLS Series fuses and the 481 Series Alarm fuses.

### Electrical Parameters

| Part Number | System Number | Voltage Rating<br>V DC | Current Rating<br>Amps | Terminal Type |
|-------------|---------------|------------------------|------------------------|---------------|
| LTFD101-1   | LTFD0101ZX1   | 80                     | 1-125                  | Bullet        |
| LTFD101-2   | LTFD0101ZX2   | 80                     | 1-125                  | Screw         |
| LTFD101-3   | LTFD0101ZX3   | 80                     | 1-125                  | Stud          |
| LTFD101-4   | LTFD0101ZX4   | 80                     | 1-125                  | Clip          |