

# 2920L Series

## Surface Mount



### Description

The 2920L Series PTC provides surface mount overcurrent protection for medium voltage ( $\leq 60V$ ) applications where resettable protection is desired.

### Features & Benefits

- RoHS compliant, lead-free and halogen-free
- Fast response to fault currents
- High voltage
- Low-profile

### Applications

- IEEE 1394 port protection
- Powered ethernet port protection (IEEE 802.3 af)
- Automotive electronic control module protection
- Low voltage telecom equipment protection

### Additional Information



Resources



Accessories



Samples

### Agency Approvals

| Agency | Agency File Number |
|--------|--------------------|
|        | E183209            |
|        | R50119118          |

### Electrical Characteristics

| Part Number | Marking  | $I_{hold}$<br>(A) | $I_{trip}$<br>(A) | $V_{max}$<br>(Vdc) | $I_{max}$<br>(A) | $P_d$ typ.<br>(W) | Maximum Time To Trip |                | Resistance                |                            | Agency Approvals |         |
|-------------|----------|-------------------|-------------------|--------------------|------------------|-------------------|----------------------|----------------|---------------------------|----------------------------|------------------|---------|
|             |          |                   |                   |                    |                  |                   | Current<br>(A)       | Time<br>(Sec.) | $R_{min}$<br>( $\Omega$ ) | $R_{1max}$<br>( $\Omega$ ) |                  |         |
| 2920L030    | LF030    | 0.30              | 0.60              | 60                 | 10               | 1.50              | 1.50                 | 3.00           | 1.200                     | 4.800                      | X                | X       |
| 2920L035    | LF035●72 | 0.35              | 0.70              | 72                 | 10               | 2.50              | 2.50                 | 5.00           | 0.500                     | 4.000                      | X                | Pending |
| 2920L050    | LF050    | 0.50              | 1.00              | 60                 | 10               | 1.50              | 2.50                 | 4.00           | 0.350                     | 1.400                      | X                | X       |
| 2920L050/72 | LF050●72 | 0.50              | 1.00              | 72                 | 10               | 2.50              | 2.50                 | 5.00           | 0.300                     | 1.500                      | X                | Pending |
| 2920L075    | LF075    | 0.75              | 1.50              | 30                 | 40               | 1.50              | 8.00                 | 0.30           | 0.350                     | 1.000                      | X                | X       |
| 2920L075/60 | LF075●60 | 0.75              | 1.50              | 60                 | 10               | 1.50              | 8.00                 | 0.30           | 0.300                     | 0.950                      | X                | X       |
| 2920L075/72 | LF075●72 | 0.75              | 1.50              | 72                 | 10               | 2.50              | 8.00                 | 0.30           | 0.240                     | 0.950                      | X                | X       |
| 2920L100    | LF100    | 1.10              | 2.20              | 33                 | 40               | 1.50              | 8.00                 | 0.50           | 0.120                     | 0.410                      | X                | X       |
| 2920L110/60 | LF110    | 1.10              | 2.20              | 60                 | 20               | 2.00              | 8.00                 | 0.50           | 0.120                     | 0.410                      | X                | X       |
| 2920L125    | LF125    | 1.25              | 2.50              | 15                 | 40               | 1.50              | 8.00                 | 2.00           | 0.070                     | 0.250                      | X                | X       |
| 2920L150    | LF150    | 1.50              | 3.00              | 33                 | 40               | 1.50              | 8.00                 | 2.00           | 0.080                     | 0.230                      | X                | X       |
| 2920L150/60 | LF150●60 | 1.50              | 3.00              | 60                 | 20               | 2.50              | 8.00                 | 5.00           | 0.070                     | 0.250                      | X                | Pending |
| 2920L185    | LF185    | 1.85              | 3.70              | 33                 | 40               | 1.50              | 8.00                 | 2.50           | 0.050                     | 0.150                      | X                | X       |
| 2920L200    | LF200    | 2.00              | 4.00              | 15                 | 40               | 1.50              | 8.00                 | 5.00           | 0.050                     | 0.125                      | X                | X       |
| 2920L200/24 | LF200●24 | 2.00              | 4.00              | 24                 | 40               | 1.50              | 8.00                 | 5.00           | 0.050                     | 0.125                      | X                | X       |
| 2920L250    | LF250    | 2.50              | 5.00              | 15                 | 40               | 1.50              | 8.00                 | 5.00           | 0.035                     | 0.085                      | X                | X       |
| 2920L260    | LF260    | 2.60              | 5.00              | 6                  | 40               | 1.50              | 8.00                 | 10.00          | 0.025                     | 0.075                      | X                | X       |
| 2920L260/24 | LF260●24 | 2.60              | 5.00              | 24                 | 40               | 1.50              | 8.00                 | 5.00           | 0.025                     | 0.075                      | X                | X       |
| 2920L260/33 | LF260●33 | 2.60              | 5.00              | 33                 | 40               | 3.00              | 8.00                 | 15.00          | 0.020                     | 0.075                      | X                | Pending |
| 2920L300    | LF300    | 3.00              | 5.00              | 6                  | 40               | 1.50              | 8.00                 | 20.00          | 0.015                     | 0.048                      | X                | X       |
| 2920L300/15 | LF300●15 | 3.00              | 5.00              | 15                 | 40               | 1.50              | 8.00                 | 20.00          | 0.015                     | 0.048                      | X                | X       |
| 2920L330/24 | LF330    | 3.3               | 5.50              | 24                 | 40               | 2.0               | 8.00                 | 5.00           | 0.015                     | 0.055                      | X                | X       |
| 2920L400/15 | LF400    | 4.00              | 8.00              | 15                 | 40               | 1.50              | 20.00                | 4.00           | 0.010                     | 0.040                      | X                | X       |
| 2920L500/16 | LF500●16 | 5.00              | 10.00             | 16                 | 40               | 2.0               | 20.00                | 5.00           | 0.005                     | 0.025                      | X                | X       |
| 2920L600/12 | LF600●12 | 6.00              | 12.00             | 12                 | 50               | 2.00              | 30.00                | 2.00           | 0.004                     | 0.020                      | X                | X       |
| 2920L600/16 | LF600●16 | 6.00              | 12.00             | 16                 | 40               | 2.20              | 30.00                | 2.00           | 0.004                     | 0.020                      | X                | X       |
| 2920L700/12 | LF700●12 | 7.00              | 14.00             | 12                 | 50               | 2.00              | 35.00                | 2.00           | 0.003                     | 0.018                      | X                | X       |

$I_{hold}$  = Hold current: maximum current device will pass without tripping in 20°C still air.

$I_{trip}$  = Trip current: minimum current at which the device will trip in 20°C still air.

$V_{max}$  = Maximum voltage device can withstand without damage at rated current ( $I_{max}$ )

$I_{max}$  = Maximum fault current device can withstand without damage at rated voltage ( $V_{max}$ )

$P_d$  = Power dissipated from device when in the tripped state at 20°C still air.

$R_{min}$  = Minimum resistance of device in initial (un-soldered) state.

$R_{typ}$  = Typical resistance of device in initial (un-soldered) state.

$R_{1max}$  = Maximum resistance of device at 20°C measured one hour after tripping or reflow soldering of 260°C for 20 sec.

**Caution:** Operation beyond the specified rating may result in damage and possible arcing and flame.

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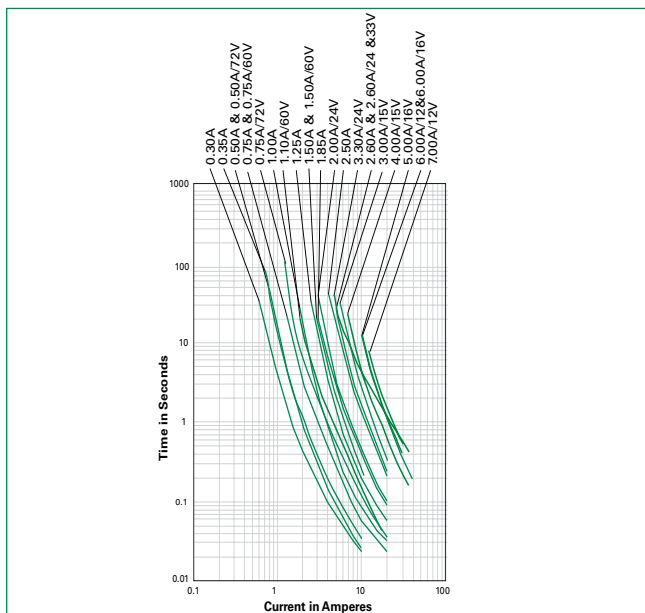
## Surface Mount

### Temperature Derating

| Part Number | Ambient Operation Temperature |       |      |      |      |      |      |      |      |
|-------------|-------------------------------|-------|------|------|------|------|------|------|------|
|             | -40°C                         | -20°C | 0°C  | 20°C | 40°C | 50°C | 60°C | 70°C | 85°C |
|             | Hold Current (A)              |       |      |      |      |      |      |      |      |
| 2920L030    | 0.45                          | 0.40  | 0.35 | 0.30 | 0.25 | 0.23 | 0.20 | 0.17 | 0.14 |
| 2920L035    | 0.55                          | 0.49  | 0.42 | 0.35 | 0.30 | 0.26 | 0.23 | 0.20 | 0.15 |
| 2920L050    | 0.76                          | 0.67  | 0.59 | 0.50 | 0.42 | 0.38 | 0.33 | 0.29 | 0.23 |
| 2920L050/72 | 0.78                          | 0.69  | 0.60 | 0.50 | 0.42 | 0.38 | 0.33 | 0.29 | 0.22 |
| 2920L075    | 1.13                          | 1.01  | 0.88 | 0.75 | 0.62 | 0.56 | 0.50 | 0.44 | 0.34 |
| 2920L075/60 | 1.13                          | 1.01  | 0.88 | 0.75 | 0.62 | 0.56 | 0.50 | 0.44 | 0.34 |
| 2920L075/72 | 1.13                          | 1.01  | 0.88 | 0.75 | 0.62 | 0.56 | 0.50 | 0.44 | 0.34 |
| 2920L100    | 1.66                          | 1.47  | 1.29 | 1.10 | 0.91 | 0.83 | 0.73 | 0.64 | 0.50 |
| 2920L110/60 | 1.66                          | 1.47  | 1.29 | 1.10 | 0.91 | 0.83 | 0.73 | 0.64 | 0.50 |
| 2920L125    | 1.89                          | 1.68  | 1.46 | 1.25 | 1.04 | 0.94 | 0.83 | 0.73 | 0.56 |
| 2920L150    | 2.27                          | 2.01  | 1.76 | 1.50 | 1.25 | 1.13 | 1.00 | 0.87 | 0.74 |
| 2920L150/60 | 2.31                          | 2.05  | 1.80 | 1.50 | 1.28 | 1.15 | 1.02 | 0.89 | 0.70 |
| 2920L185    | 2.80                          | 2.47  | 2.17 | 1.85 | 1.54 | 1.39 | 1.22 | 1.07 | 0.85 |
| 2920L200    | 3.02                          | 2.68  | 2.34 | 2.00 | 1.66 | 1.50 | 1.32 | 1.16 | 0.90 |
| 2920L200/24 | 3.14                          | 2.77  | 2.42 | 2.00 | 1.73 | 1.56 | 1.38 | 1.20 | 0.98 |
| 2920L250    | 3.78                          | 3.35  | 2.93 | 2.50 | 2.08 | 1.88 | 1.65 | 1.45 | 1.13 |
| 2920L260    | 3.64                          | 3.25  | 2.91 | 2.60 | 2.26 | 2.08 | 1.95 | 1.74 | 1.48 |
| 2920L260/24 | 3.64                          | 3.25  | 2.91 | 2.60 | 2.26 | 2.08 | 1.95 | 1.74 | 1.48 |
| 2920L260/33 | 3.95                          | 3.52  | 3.09 | 2.60 | 2.24 | 2.02 | 1.81 | 1.60 | 1.27 |
| 2920L300    | 4.53                          | 4.02  | 3.51 | 3.00 | 2.52 | 2.26 | 1.99 | 1.75 | 1.34 |
| 2920L300/15 | 4.20                          | 3.85  | 3.44 | 3.00 | 2.69 | 2.50 | 2.31 | 2.12 | 1.83 |
| 2920L330/24 | 4.60                          | 4.20  | 3.75 | 3.30 | 2.95 | 2.75 | 2.50 | 2.25 | 1.70 |
| 2920L400/15 | 5.50                          | 5.00  | 4.50 | 4.00 | 3.40 | 3.10 | 2.80 | 2.50 | 2.10 |
| 2920L500/16 | 7.55                          | 6.70  | 5.85 | 5.00 | 4.15 | 3.75 | 3.30 | 2.90 | 2.25 |
| 2920L600/12 | 8.58                          | 7.83  | 7.05 | 6.00 | 5.27 | 4.87 | 4.48 | 4.05 | 3.38 |
| 2920L600/16 | 8.58                          | 7.83  | 7.05 | 6.00 | 5.27 | 4.87 | 4.48 | 4.05 | 3.38 |
| 2920L700/12 | 9.48                          | 8.73  | 7.92 | 7.00 | 6.36 | 5.88 | 5.41 | 4.83 | 3.94 |

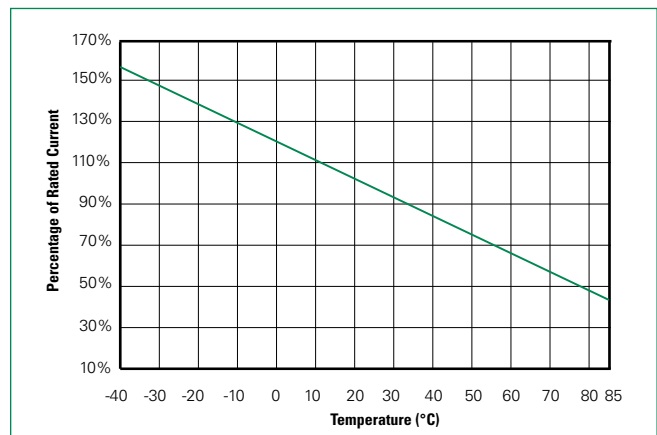
**Notes:** The temperature derating data is only for reference, please contact Littelfuse technical support for detail temperature derating information.

### Average Time Current Curves



The average time current curves and Temperature Derating curve performance is affected by a number of variables, and these curves provided as guidance only. Customer must verify the performance in their application.

### Temperature Derating Curve



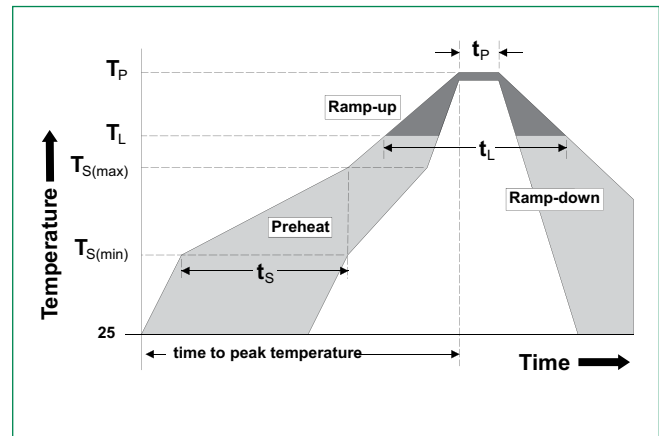
**Note:** Typical Temperature derating curve, refer to table for derating data

# 2920L Series

## Surface Mount

### Soldering Parameters

|                                                                           |                                                  |                         |
|---------------------------------------------------------------------------|--------------------------------------------------|-------------------------|
| <b>Profile Feature</b>                                                    |                                                  | Pb-Free Assembly        |
| <b>Average Ramp-Up Rate (<math>T_{S(max)}</math> to <math>T_p</math>)</b> |                                                  | 3°C/second max          |
| <b>Pre Heat:</b>                                                          | <b>Temperature Min (<math>T_{S(min)}</math>)</b> | 150°C                   |
|                                                                           | <b>Temperature Max (<math>T_{S(max)}</math>)</b> | 200°C                   |
|                                                                           | <b>Time (Min to Max) (<math>t_s</math>)</b>      | 60 – 180 secs           |
| <b>Time Maintained Above:</b>                                             | <b>Temperature (<math>T_L</math>)</b>            | 217°C                   |
|                                                                           | <b>Temperature (<math>t_L</math>)</b>            | 60 – 150 seconds        |
| <b>Peak / Classification Temperature (<math>T_p</math>)</b>               |                                                  | 260 <sup>+0/-5</sup> °C |
| <b>Time within 5°C of actual peak Temperature (<math>t_p</math>)</b>      |                                                  | 20 – 40 seconds         |
| <b>Ramp-down Rate</b>                                                     |                                                  | 6°C/second max          |
| <b>Time 25°C to peak Temperature (<math>T_p</math>)</b>                   |                                                  | 8 minutes Max.          |



- All temperature refer to topside of the package, measured on the package body surface
- If reflow temperature exceeds the recommended profile, devices may not meet the performance requirements
- Recommended reflow methods: IR, vapor phase oven, hot air oven,  $N_2$  environment for lead
- Recommended maximum paste thickness is 0.25mm (0.010inch)
- Devices can be cleaned using standard industry methods and solvents
- Devices can be reworked using the standard industry practices

### Physical Specifications

|                           |                                                              |
|---------------------------|--------------------------------------------------------------|
| <b>Terminal Material</b>  | Solder-Plated Copper (Solder Material: Matte Tin(Sn))        |
| <b>Lead Solderability</b> | Meets EIA Specification RS186-9E, ANSI/J-STD-002 Category 3. |

### Environmental Specifications

|                                                            |                                                                                   |
|------------------------------------------------------------|-----------------------------------------------------------------------------------|
| <b>Operating Temperature</b>                               | -40°C to +85°C                                                                    |
| <b>Maximum Device Surface Temperature in Tripped State</b> | 125°C                                                                             |
| <b>Passive Aging</b>                                       | +85°C, 1000 hours<br>-/+5% typical resistance change                              |
| <b>Humidity Aging</b>                                      | +85°C, 85%, R.H., 1000 hours<br>-/+5% typical resistance change                   |
| <b>Thermal Shock</b>                                       | MIL-STD-202, Method 107<br>+85°C/-40°C 20 times<br>-30% typical resistance change |
| <b>Solvent Resistance</b>                                  | MIL-STD-202, Method 215                                                           |
| <b>Vibration</b>                                           | MIL-STD-883, Method 2007, Condition A                                             |
| <b>Moisture Sensitivity Level</b>                          | Level 2a, J-STD-020                                                               |

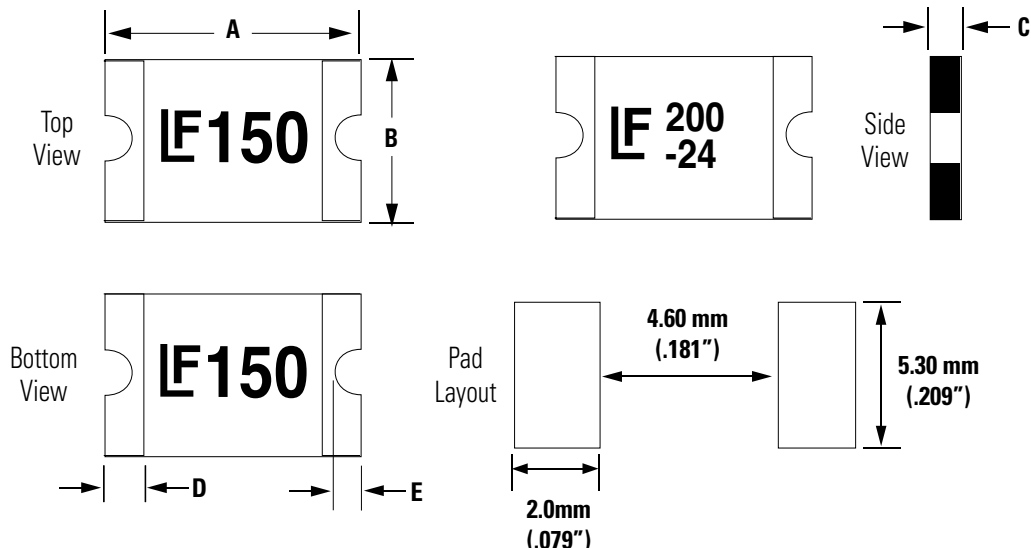
# 2920L Series

## Surface Mount

### Dimensions (mm)

| Part Number | A      |      |      |      | B      |      |     |      | C      |       |      |      | D      |     |     |     | E      |      |      |     |
|-------------|--------|------|------|------|--------|------|-----|------|--------|-------|------|------|--------|-----|-----|-----|--------|------|------|-----|
|             | Inches |      | mm   |      | Inches |      | mm  |      | Inches |       | mm   |      | Inches |     | mm  |     | Inches |      | mm   |     |
|             | Min    | Max  | Min  | Max  | Min    | Max  | Min | Max  | Min    | Max   | Min  | Max  | Min    | Max | Min | Max | Min    | Max  | Min  | Max |
| 2920L030    | 0.26   | 0.31 | 6.73 | 7.98 | 0.19   | 0.21 | 4.8 | 5.44 | 0.03   | 0.05  | 0.75 | 1.25 | 0.01   | 0.1 | 0.3 | 2.5 | 0.01   | 0.08 | 0.25 | 2.0 |
| 2920L035    | 0.26   | 0.31 | 6.73 | 7.98 | 0.19   | 0.21 | 4.8 | 5.44 | 0.03   | 0.05  | 0.75 | 1.25 | 0.01   | 0.1 | 0.3 | 2.5 | 0.01   | 0.08 | 0.25 | 2.0 |
| 2920L050    | 0.26   | 0.31 | 6.73 | 7.98 | 0.19   | 0.21 | 4.8 | 5.44 | 0.03   | 0.05  | 0.75 | 1.25 | 0.01   | 0.1 | 0.3 | 2.5 | 0.01   | 0.08 | 0.25 | 2.0 |
| 2920L050/72 | 0.26   | 0.31 | 6.73 | 7.98 | 0.19   | 0.21 | 4.8 | 5.44 | 0.03   | 0.05  | 0.75 | 1.25 | 0.01   | 0.1 | 0.3 | 2.5 | 0.01   | 0.08 | 0.25 | 2.0 |
| 2920L075    | 0.26   | 0.31 | 6.73 | 7.98 | 0.19   | 0.21 | 4.8 | 5.44 | 0.03   | 0.05  | 0.75 | 1.25 | 0.01   | 0.1 | 0.3 | 2.5 | 0.01   | 0.08 | 0.25 | 2.0 |
| 2920L075/60 | 0.26   | 0.31 | 6.73 | 7.98 | 0.19   | 0.21 | 4.8 | 5.44 | 0.05   | 0.07  | 1.20 | 1.80 | 0.01   | 0.1 | 0.3 | 2.5 | 0.01   | 0.08 | 0.25 | 2.0 |
| 2920L075/72 | 0.26   | 0.31 | 6.73 | 7.98 | 0.19   | 0.21 | 4.8 | 5.44 | 0.05   | 0.07  | 1.20 | 1.80 | 0.01   | 0.1 | 0.3 | 2.5 | 0.01   | 0.08 | 0.25 | 2.0 |
| 2920L100    | 0.26   | 0.31 | 6.73 | 7.98 | 0.19   | 0.21 | 4.8 | 5.44 | 0.02   | 0.04  | 0.55 | 1.00 | 0.01   | 0.1 | 0.3 | 2.5 | 0.01   | 0.08 | 0.25 | 2.0 |
| 2920L110/60 | 0.26   | 0.31 | 6.73 | 7.98 | 0.19   | 0.21 | 4.8 | 5.44 | 0.06   | 0.079 | 1.2  | 2.0  | 0.01   | 0.1 | 0.3 | 2.5 | 0.01   | 0.08 | 0.25 | 2.0 |
| 2920L125    | 0.26   | 0.31 | 6.73 | 7.98 | 0.19   | 0.21 | 4.8 | 5.44 | 0.02   | 0.04  | 0.55 | 1.00 | 0.01   | 0.1 | 0.3 | 2.5 | 0.01   | 0.08 | 0.25 | 2.0 |
| 2920L150    | 0.26   | 0.31 | 6.73 | 7.98 | 0.19   | 0.21 | 4.8 | 5.44 | 0.03   | 0.05  | 0.75 | 1.25 | 0.01   | 0.1 | 0.3 | 2.5 | 0.01   | 0.08 | 0.25 | 2.0 |
| 2920L150/60 | 0.26   | 0.31 | 6.73 | 7.98 | 0.19   | 0.21 | 4.8 | 5.44 | 0.03   | 0.07  | 0.80 | 1.80 | 0.01   | 0.1 | 0.3 | 2.5 | 0.01   | 0.08 | 0.25 | 2.0 |
| 2920L185    | 0.26   | 0.31 | 6.73 | 7.98 | 0.19   | 0.21 | 4.8 | 5.44 | 0.03   | 0.05  | 0.75 | 1.25 | 0.01   | 0.1 | 0.3 | 2.5 | 0.01   | 0.08 | 0.25 | 2.0 |
| 2920L200    | 0.26   | 0.31 | 6.73 | 7.98 | 0.19   | 0.21 | 4.8 | 5.44 | 0.03   | 0.05  | 0.75 | 1.25 | 0.01   | 0.1 | 0.3 | 2.5 | 0.01   | 0.08 | 0.25 | 2.0 |
| 2920L200/24 | 0.26   | 0.31 | 6.73 | 7.98 | 0.19   | 0.21 | 4.8 | 5.44 | 0.03   | 0.05  | 0.75 | 1.25 | 0.01   | 0.1 | 0.3 | 2.5 | 0.01   | 0.08 | 0.25 | 2.0 |
| 2920L250    | 0.26   | 0.31 | 6.73 | 7.98 | 0.19   | 0.21 | 4.8 | 5.44 | 0.03   | 0.05  | 0.75 | 1.25 | 0.01   | 0.1 | 0.3 | 2.5 | 0.01   | 0.08 | 0.25 | 2.0 |
| 2920L260    | 0.26   | 0.31 | 6.73 | 7.98 | 0.19   | 0.21 | 4.8 | 5.44 | 0.02   | 0.04  | 0.55 | 1.00 | 0.01   | 0.1 | 0.3 | 2.5 | 0.01   | 0.08 | 0.25 | 2.0 |
| 2920L260/24 | 0.26   | 0.31 | 6.73 | 7.98 | 0.19   | 0.21 | 4.8 | 5.44 | 0.03   | 0.05  | 0.75 | 1.25 | 0.01   | 0.1 | 0.3 | 2.5 | 0.01   | 0.08 | 0.25 | 2.0 |
| 2920L260/33 | 0.26   | 0.31 | 6.73 | 7.98 | 0.19   | 0.21 | 4.8 | 5.44 | 0.03   | 0.07  | 0.80 | 1.80 | 0.01   | 0.1 | 0.3 | 2.5 | 0.01   | 0.08 | 0.25 | 2.0 |
| 2920L300    | 0.26   | 0.31 | 6.73 | 7.98 | 0.19   | 0.21 | 4.8 | 5.44 | 0.03   | 0.05  | 0.75 | 1.25 | 0.01   | 0.1 | 0.3 | 2.5 | 0.01   | 0.08 | 0.25 | 2.0 |
| 2920L300/15 | 0.26   | 0.31 | 6.73 | 7.98 | 0.19   | 0.21 | 4.8 | 5.44 | 0.03   | 0.05  | 0.75 | 1.25 | 0.01   | 0.1 | 0.3 | 2.5 | 0.01   | 0.08 | 0.25 | 2.0 |
| 2920L330/24 | 0.26   | 0.31 | 6.73 | 7.98 | 0.19   | 0.21 | 4.8 | 5.44 | 0.06   | 0.079 | 1.2  | 2    | 0.01   | 0.1 | 0.3 | 2.5 | 0.01   | 0.08 | 0.25 | 2.0 |
| 2920L400/15 | 0.26   | 0.31 | 6.73 | 7.98 | 0.19   | 0.21 | 4.8 | 5.44 | 0.03   | 0.06  | 0.8  | 1.6  | 0.01   | 0.1 | 0.3 | 2.5 | 0.01   | 0.08 | 0.25 | 2.0 |
| 2920L500/16 | 0.26   | 0.31 | 6.73 | 7.98 | 0.19   | 0.21 | 4.8 | 5.44 | 0.03   | 0.06  | 0.8  | 1.6  | 0.01   | 0.1 | 0.3 | 2.5 | 0.01   | 0.08 | 0.25 | 2.0 |
| 2920L600/12 | 0.26   | 0.31 | 6.73 | 7.98 | 0.19   | 0.21 | 4.8 | 5.44 | 0.031  | 0.063 | 0.8  | 1.6  | 0.01   | 0.1 | 0.3 | 2.5 | 0.01   | 0.08 | 0.25 | 2.0 |
| 2920L600/16 | 0.26   | 0.31 | 6.73 | 7.98 | 0.19   | 0.21 | 4.8 | 5.44 | 0.031  | 0.063 | 0.8  | 1.6  | 0.01   | 0.1 | 0.3 | 2.5 | 0.01   | 0.08 | 0.25 | 2.0 |
| 2920L700/12 | 0.26   | 0.31 | 6.73 | 7.98 | 0.19   | 0.21 | 4.8 | 5.44 | 0.031  | 0.063 | 0.8  | 1.6  | 0.01   | 0.1 | 0.3 | 2.5 | 0.01   | 0.08 | 0.25 | 2.0 |

MARKING CODE VARIES  
WITH AMPERAGE AND VOLTAGE RATING  
(SEE ELECTRICAL CHARACTERISTIC TABLE)  
SHOWN ARE:  
- 1.5A/33V RATING (LEFT)  
- 2.0A/24V RATING (RIGHT)



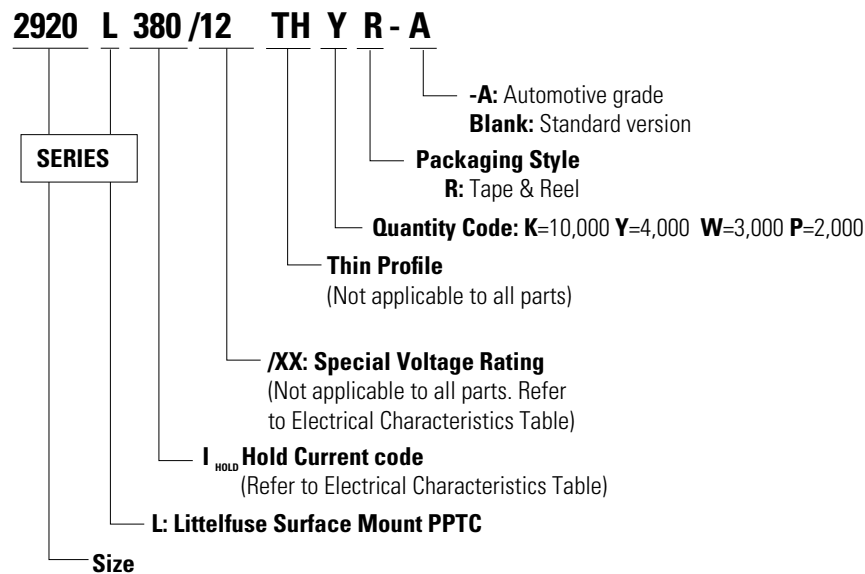
# 2920L Series

## Surface Mount

### Packaging

| Part Number | Ordering Number | Halogen Free | $I_{hold}$ (A) | $I_{hold}$ Code | Voltage Option | Packaging Option | Quantity | Quantity & Packaging Codes |
|-------------|-----------------|--------------|----------------|-----------------|----------------|------------------|----------|----------------------------|
| 2920L030    | 2920L030DR      | Yes          | 0.30           | 030             | -              | Tape and Reel    | 1500     | DR                         |
| 2920L035    | 2920L035DR      | Yes          | 0.35           | 035             | -              | Tape and Reel    | 1500     | DR                         |
| 2920L050    | 2920L050DR      | Yes          | 0.50           | 050             | -              | Tape and Reel    | 1500     | DR                         |
| 2920L050/72 | 2920L050/72DR   | Yes          | 0.50           | 050             | /72            | Tape and Reel    | 1500     | DR                         |
| 2920L075    | 2920L075DR      | Yes          | 0.75           | 075             | -              | Tape and Reel    | 1500     | DR                         |
| 2920L075/60 | 2920L075/60MR   | Yes          | 0.75           | 075             | /60            | Tape and Reel    | 1000     | MR                         |
| 2920L075/72 | 2920L075/72MR   | Yes          | 0.75           | 075             | /72            | Tape & Reel      | 1000     | MR                         |
| 2920L100    | 2920L100PR      | Yes          | 1.10           | 100             | -              | Tape and Reel    | 2000     | PR                         |
| 2920L110/60 | 2920L110/60MR   | Yes          | 1.10           | 110             | /60            | Tape and Reel    | 1000     | MR                         |
| 2920L125    | 2920L125PR      | Yes          | 1.25           | 125             | -              | Tape and Reel    | 2000     | PR                         |
| 2920L150    | 2920L150DR      | Yes          | 1.50           | 150             | -              | Tape and Reel    | 1500     | DR                         |
| 2920L150/60 | 2920L150/60MR   | Yes          | 1.50           | 150             | /60            | Tape and Reel    | 1000     | MR                         |
| 2920L185    | 2920L185DR      | Yes          | 1.85           | 185             | -              | Tape and Reel    | 1500     | DR                         |
| 2920L200    | 2920L200DR      | Yes          | 2.00           | 200             | -              | Tape and Reel    | 1500     | DR                         |
| 2920L200/24 | 2920L200/24DR   | Yes          | 2.00           | 200             | /24            | Tape and Reel    | 1500     | DR                         |
| 2920L250    | 2920L250DR      | Yes          | 2.50           | 250             | -              | Tape and Reel    | 1500     | DR                         |
| 2920L260/24 | 2920L260/24DR   | Yes          | 2.60           | 260             | /24            | Tape and Reel    | 1500     | DR                         |
| 2920L260/33 | 2920L260/33DR   | Yes          | 2.60           | 260             | /33            | Tape and Reel    | 1500     | DR                         |
| 2920L260    | 2920L260PR      | Yes          | 2.60           | 260             | -              | Tape and Reel    | 2000     | PR                         |
| 2920L300    | 2920L300DR      | Yes          | 3.00           | 300             | -              | Tape and Reel    | 1500     | DR                         |
| 2920L300/15 | 2920L300/15DR   | Yes          | 3.00           | 300             | /15            | Tape and Reel    | 1500     | DR                         |
| 2920L330/24 | 2920L330/24MR   | Yes          | 3.30           | 330             | /24            | Tape and Reel    | 1000     | MR                         |
| 2920L400/15 | 2920L400/15MR   | Yes          | 4.00           | 400             | /15            | Tape and Reel    | 1000     | MR                         |
| 2920L500/16 | 2920L500/16MR   | Yes          | 5.00           | 500             | /16            | Tape and Reel    | 1000     | MR                         |
| 2920L600/12 | 2920L600/12MR   | Yes          | 6.00           | 600             | /12            | Tape and Reel    | 1000     | MR                         |
| 2920L600/16 | 2920L600/16MR   | Yes          | 6.00           | 600             | /16            | Tape and Reel    | 1000     | MR                         |
| 2920L700/12 | 2920L700/12MR   | Yes          | 7.00           | 700             | /12            | Tape and Reel    | 1000     | MR                         |

### Part Ordering Number System



# 2920L Series

## Surface Mount

### Tape and Reel Specifications

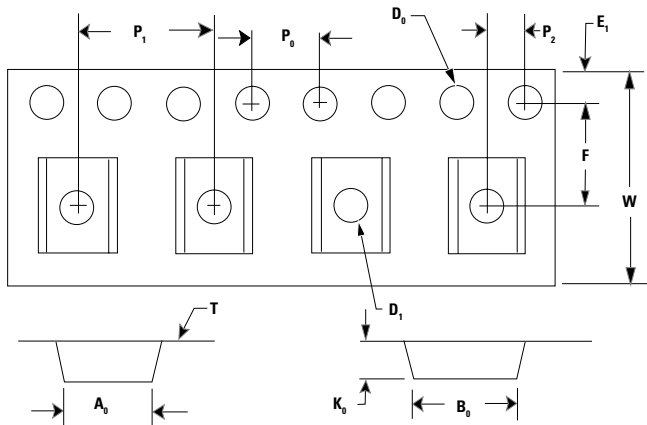
| TAPE SPECIFICATIONS: EIA-481-1 (mm) |                                                                                                                                                                                |                                    |                                                                                                                                                    |
|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
|                                     | 2920L030,<br>2920L035<br>2920L050, 2920L050/72<br>2920L075,<br>2920L150<br>2920L185,<br>2920L200, 2920L200/24<br>2920L250<br>2920L260/24, 2920L260/33<br>2920L300, 2920L300/15 | 2920L100,<br>2920L125,<br>2920L260 | 2920L075/60<br>2920L075/72<br>2920L110/60<br>2920L150/60<br>2920L500/16<br>2920L330/24<br>2920L400/15<br>2920L600/12<br>2920L600/16<br>2920L700/12 |
| W                                   | 16.0+/-0.30                                                                                                                                                                    | 16.0+/-0.30                        | 16.0+/-0.30                                                                                                                                        |
| F                                   | 7.50+/-0.10                                                                                                                                                                    | 7.50+/-0.10                        | 7.50+/-0.10                                                                                                                                        |
| E <sub>1</sub>                      | 1.75+/-0.10                                                                                                                                                                    | 1.75+/-0.10                        | 1.75+/-0.10                                                                                                                                        |
| D <sub>0</sub>                      | 1.55+/-0.05                                                                                                                                                                    | 1.55+/-0.05                        | 1.50+/-0.05                                                                                                                                        |
| D <sub>1</sub>                      | 1.50+/-0.10                                                                                                                                                                    | 1.50+/-0.10                        | 1.50 (min)                                                                                                                                         |
| P <sub>0</sub>                      | 4.00+/-0.10                                                                                                                                                                    | 4.00+/-0.10                        | 4.00+/-0.10                                                                                                                                        |
| P <sub>1</sub>                      | 8.00+/-0.10                                                                                                                                                                    | 8.00+/-0.10                        | 8.00+/-0.10                                                                                                                                        |
| P <sub>2</sub>                      | 2.00+/-0.10                                                                                                                                                                    | 2.00+/-0.10                        | 2.00+/-0.10                                                                                                                                        |
| A <sub>0</sub>                      | 5.74+/-0.10                                                                                                                                                                    | 5.74+/-0.10                        | 5.45+/-0.10                                                                                                                                        |
| B <sub>0</sub>                      | 8.02+/-0.10                                                                                                                                                                    | 8.02+/-0.10                        | 7.90+/-0.10                                                                                                                                        |
| T                                   | 0.30+/-0.10                                                                                                                                                                    | 0.30+/-0.10                        | 0.30+/-0.05                                                                                                                                        |
| K <sub>0</sub>                      | 1.30+/-0.10                                                                                                                                                                    | 0.91+/-0.10                        | 2.00+/-0.10                                                                                                                                        |
| Leader min.                         | 390                                                                                                                                                                            | 390                                | 390                                                                                                                                                |
| Trailer min.                        | 160                                                                                                                                                                            | 160                                | 160                                                                                                                                                |

### REEL DIMENSIONS: EIA-481-1 (mm)

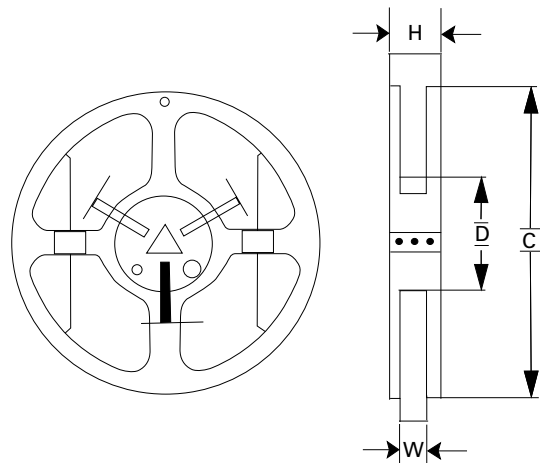
|   |              |
|---|--------------|
| C | Ø180.0+/-3.0 |
| D | Ø60+/-0.5    |
| H | 19.5+/-1.0   |
| W | 17+/-0.2     |

### Tape and Reel Diagram

#### Tape Specifications



#### Reel Specifications



#### Warning:

- Users shall independently assess the suitability of these devices for each of their applications
- Operation of these devices beyond the stated maximum ratings could result in damage to the devices and lead to electrical arcing and/or fire
- These devices are intended to protect against the effects of temporary over-current or over-temperature conditions and are not intended to perform as protective devices where such conditions are expected to be repetitive or prolonged in duration
- Exposure to silicon-based oils, solvents, electrolytes, acids, and similar materials can adversely affect the performance of these PPTC devices
- These devices undergo thermal expansion under fault conditions, and thus shall be provided with adequate space and be protected against mechanical stresses
- Circuits with inductance may generate a voltage (L di/dt) above the rated voltage of the PPTC device.

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