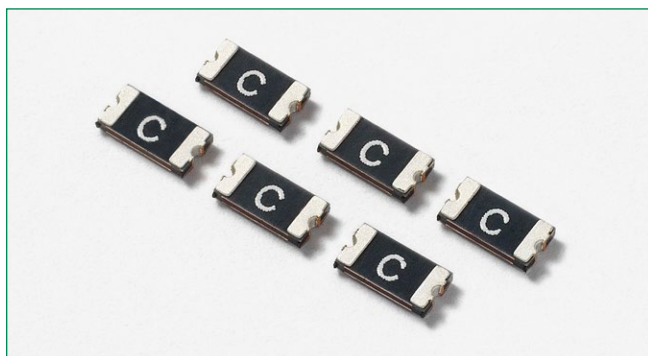


### 1206L Series



#### Description

The 1206L Series PTC provides surface mount overcurrent protection for applications where space is at a premium and resettable protection is desired.

#### Features

- RoHS compliant, lead-free and halogen-free
- Fast response to fault currents
- Compact design saves board space
- Low resistance
- Low-profile
- Compatible with high temperature solders

#### Applications

- USB peripherals
- Disk drives
- CD-ROMs
- Plug and play protection for motherboards and peripherals
- Mobile phones - battery and port protection
- Disk drives
- PDAs / digital cameras
- Game console port protection

#### Agency Approvals

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

#### Electrical Characteristics

| Part Number             | Marking | I <sub>hold</sub><br>(A) | I <sub>trip</sub><br>(A) | V <sub>max</sub><br>(Vdc) | I <sub>max</sub><br>(A) | P <sub>d</sub> typ.<br>(W) | Maximum Time To Trip |                | Resistance              |                          | Agency Approvals                                                                      |                                                                                       |
|-------------------------|---------|--------------------------|--------------------------|---------------------------|-------------------------|----------------------------|----------------------|----------------|-------------------------|--------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                         |         |                          |                          |                           |                         |                            | Current<br>(A)       | Time<br>(Sec.) | R <sub>min</sub><br>(Ω) | R <sub>1max</sub><br>(Ω) |  |  |
| 1206L005/60             | f6      | 0.05                     | 0.15                     | 60                        | 10                      | 0.6                        | 0.25                 | 1.50           | 3.60                    | 20.00                    | X                                                                                     | X                                                                                     |
| 1206L010/60             | n6      | 0.10                     | 0.25                     | 60                        | 10                      | 0.6                        | 0.50                 | 1.50           | 1.50                    | 10.00                    | X                                                                                     | X                                                                                     |
| 1206L012                | A       | 0.125                    | 0.29                     | 30                        | 100                     | 0.6                        | 1.00                 | 0.20           | 1.500                   | 6.000                    | X                                                                                     | X                                                                                     |
| 1206L016                | B       | 0.16                     | 0.37                     | 30                        | 100                     | 0.6                        | 1.00                 | 0.30           | 1.200                   | 4.500                    | X                                                                                     | X                                                                                     |
| 1206L020 <sup>1,2</sup> | C       | 0.20                     | 0.42                     | 24                        | 100                     | 0.6                        | 8.00                 | 0.10           | 0.650                   | 2.600                    | X                                                                                     | X                                                                                     |
| 1206L025 <sup>1</sup>   | D       | 0.25                     | 0.50                     | 16                        | 100                     | 0.6                        | 8.00                 | 0.08           | 0.550                   | 2.300                    | X                                                                                     | X                                                                                     |
| 1206L035 <sup>1</sup>   | E       | 0.35                     | 0.75                     | 6                         | 100                     | 0.6                        | 8.00                 | 0.10           | 0.300                   | 1.200                    | X                                                                                     | X                                                                                     |
| 1206L035/16             | J       | 0.35                     | 0.75                     | 16                        | 100                     | 0.6                        | 8.00                 | 0.10           | 0.300                   | 1.200                    | X                                                                                     | X                                                                                     |
| 1206L035/30             | J3      | 0.35                     | 0.75                     | 30                        | 100                     | 0.6                        | 8.00                 | 0.10           | 0.30                    | 1.20                     | X                                                                                     | X                                                                                     |
| 1206L050 <sup>1</sup>   | F       | 0.50                     | 1.00                     | 6                         | 100                     | 0.6                        | 8.00                 | 0.10           | 0.150                   | 0.700                    | X                                                                                     | X                                                                                     |
| 1206L050/15             | M       | 0.50                     | 1.00                     | 15                        | 100                     | 0.6                        | 8.00                 | 0.10           | 0.150                   | 0.750                    | X                                                                                     | X                                                                                     |
| 1206L050/24             | F2      | 0.50                     | 1.00                     | 24                        | 100                     | 0.6                        | 8.00                 | 0.10           | 0.15                    | 0.75                     | X                                                                                     | X                                                                                     |
| 1206L075/13.2           | G1      | 0.75                     | 1.50                     | 13.2                      | 100                     | 0.6                        | 8.00                 | 0.20           | 0.090                   | 0.350                    | X                                                                                     | X                                                                                     |
| 1206L075/16             | GF      | 0.75                     | 1.50                     | 16                        | 100                     | 0.6                        | 8.00                 | 0.20           | 0.090                   | 0.2900                   | X                                                                                     | X                                                                                     |
| 1206L075TH <sup>1</sup> | G       | 0.75                     | 1.50                     | 8                         | 100                     | 0.6                        | 8.00                 | 0.20           | 0.090                   | 0.290                    | X                                                                                     | X                                                                                     |
| 1206L110TH <sup>1</sup> | H       | 1.10                     | 2.20                     | 8                         | 100                     | 0.8                        | 8.00                 | 0.10           | 0.040                   | 0.210                    | X                                                                                     | X                                                                                     |
| 1206L110/16             | HF      | 1.10                     | 2.20                     | 16                        | 100                     | 0.8                        | 8.00                 | 0.10           | 0.060                   | 0.210                    | X                                                                                     | X                                                                                     |
| 1206L150TH <sup>1</sup> | K       | 1.50                     | 3.00                     | 8                         | 100                     | 0.8                        | 8.00                 | 0.30           | 0.040                   | 0.120                    | X                                                                                     | X                                                                                     |
| 1206L175                | V       | 1.75                     | 3.50                     | 6                         | 100                     | 0.8                        | 8.00                 | 0.50           | 0.020                   | 0.090                    | X                                                                                     | X                                                                                     |
| 1206L200                | L       | 2.00                     | 3.50                     | 6                         | 100                     | 0.8                        | 8.00                 | 1.50           | 0.018                   | 0.080                    | X                                                                                     | X                                                                                     |

I<sub>hold</sub> = Hold current: maximum current device will pass without tripping in 20°C still air.  
 I<sub>trip</sub> = Trip current: minimum current at which the device will trip in 20°C still air.  
 V<sub>max</sub> = Maximum voltage device can withstand without damage at rated current (I<sub>max</sub>)  
 I<sub>max</sub> = Maximum fault current device can withstand without damage at rated voltage (V<sub>max</sub>)  
 P<sub>d</sub> = Power dissipated from device when in the tripped state at 20°C still air.

R<sub>min</sub> = Minimum resistance of device in initial (un-soldered) state.  
 R<sub>typ</sub> = Typical resistance of device in initial (un-soldered) state.  
 R<sub>1max</sub> = 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.

**1** Some older references to these devices may include “-C” in the Part Number. The “-C” should be omitted when placing new orders for the device.

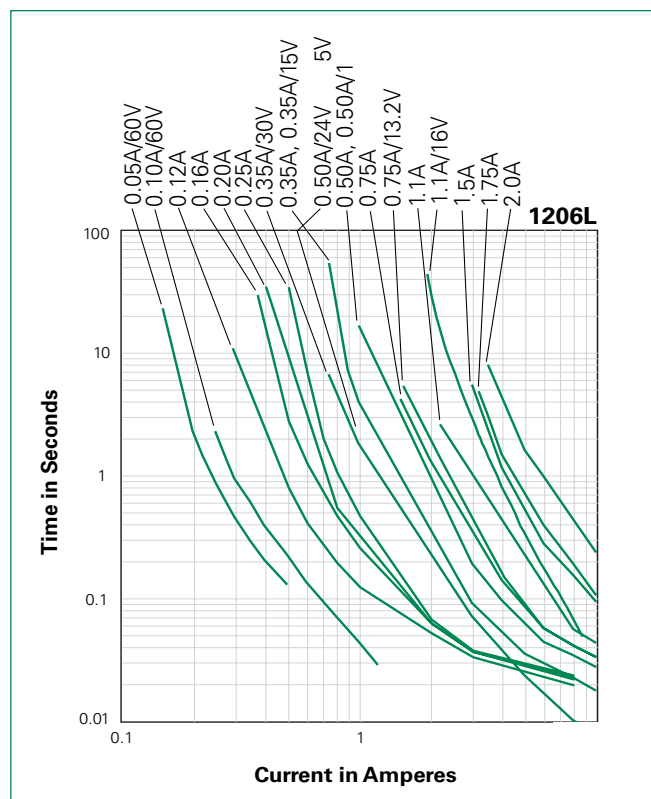
**2** Part Number tested and complied with AEC-Q200.

### 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)              |       |       |       |       |       |       |       |       |
| 1206L005/60   | 0.076                         | 0.068 | 0.060 | 0.050 | 0.043 | 0.039 | 0.034 | 0.030 | 0.023 |
| 1206L010/60   | 0.15                          | 0.14  | 0.12  | 0.10  | 0.083 | 0.074 | 0.065 | 0.056 | 0.042 |
| 1206L012      | 0.18                          | 0.16  | 0.14  | 0.125 | 0.10  | 0.09  | 0.08  | 0.07  | 0.05  |
| 1206L016      | 0.22                          | 0.20  | 0.18  | 0.16  | 0.14  | 0.12  | 0.10  | 0.09  | 0.08  |
| 1206L020      | 0.28                          | 0.25  | 0.23  | 0.20  | 0.17  | 0.15  | 0.14  | 0.12  | 0.09  |
| 1206L025      | 0.37                          | 0.33  | 0.29  | 0.25  | 0.22  | 0.20  | 0.17  | 0.15  | 0.12  |
| 1206L035      | 0.50                          | 0.45  | 0.40  | 0.35  | 0.30  | 0.27  | 0.24  | 0.21  | 0.15  |
| 1206L035/16   | 0.50                          | 0.45  | 0.40  | 0.35  | 0.30  | 0.27  | 0.24  | 0.21  | 0.15  |
| 1206L035/30   | 0.50                          | 0.45  | 0.40  | 0.35  | 0.30  | 0.27  | 0.24  | 0.21  | 0.15  |
| 1206L050      | 0.71                          | 0.64  | 0.57  | 0.50  | 0.42  | 0.39  | 0.35  | 0.31  | 0.25  |
| 1206L050/15   | 0.71                          | 0.64  | 0.57  | 0.50  | 0.42  | 0.39  | 0.35  | 0.31  | 0.25  |
| 1206L050/24   | 0.71                          | 0.64  | 0.57  | 0.50  | 0.42  | 0.39  | 0.35  | 0.31  | 0.25  |
| 1206L075/13.2 | 1.14                          | 1.04  | 0.88  | 0.75  | 0.65  | 0.59  | 0.54  | 0.49  | 0.41  |
| 1206L075/16   | 1.14                          | 1.01  | 0.88  | 0.75  | 0.65  | 0.59  | 0.54  | 0.49  | 0.41  |
| 1206L075TH    | 1.14                          | 1.01  | 0.88  | 0.75  | 0.65  | 0.59  | 0.54  | 0.49  | 0.41  |
| 1206L110TH    | 1.64                          | 1.46  | 1.30  | 1.10  | 0.92  | 0.83  | 0.80  | 0.65  | 0.52  |
| 1206L110/16   | 1.64                          | 1.46  | 1.30  | 1.10  | 0.92  | 0.83  | 0.80  | 0.65  | 0.52  |
| 1206L150TH    | 2.20                          | 1.99  | 1.77  | 1.50  | 1.34  | 1.23  | 1.10  | 1.01  | 0.84  |
| 1206L175      | 2.50                          | 2.25  | 2.00  | 1.75  | 1.55  | 1.45  | 1.35  | 1.25  | 1.10  |
| 1206L200      | 2.60                          | 2.44  | 2.35  | 2.00  | 1.78  | 1.67  | 1.50  | 1.45  | 1.10  |

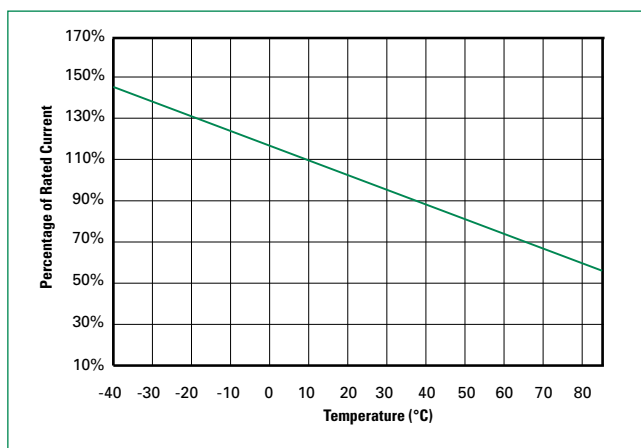
Notes: The temperature derating data is only for reference, please contact Littelfuse technical support for detail temperature derating information.

### 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



### Additional Information



**Datasheet**



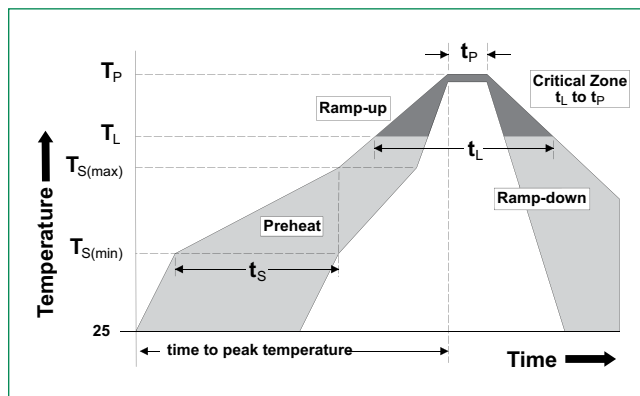
**Resources**



**Samples**

### 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

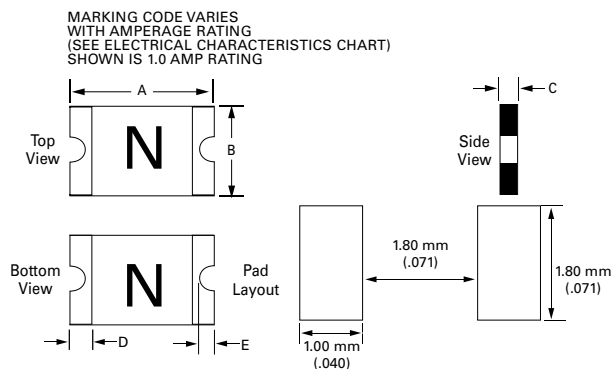
### Physical Specifications

|                           |                                                              |
|---------------------------|--------------------------------------------------------------|
| <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/Storage 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<br>No change                                              |
| <b>Vibration</b>                                           | MIL-STD-883, Method 2007, Condition A<br>No change                                |
| <b>Moisture Sensivity Level</b>                            | Level 1, J-STD-020                                                                |

## Dimensions

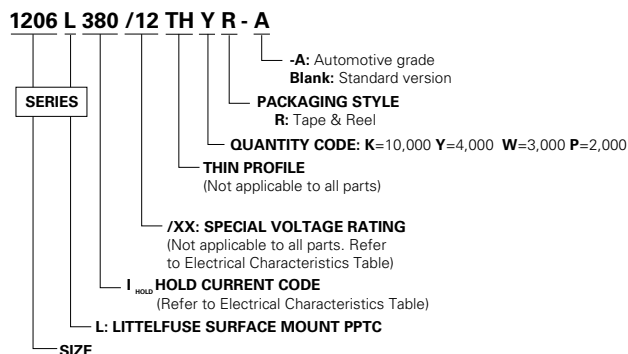


| Part Number   | A      |      |      |      | B      |      |      |      | C      |      |      |      | D      |      |      |      | E      |       |      |      |
|---------------|--------|------|------|------|--------|------|------|------|--------|------|------|------|--------|------|------|------|--------|-------|------|------|
|               | 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  |
| 1206L005/60   |        |      |      |      |        |      |      |      | 0.03   | 0.05 | 0.65 | 1.25 |        |      |      |      |        |       |      |      |
| 1206L010/60   |        |      |      |      |        |      |      |      | 0.03   | 0.05 | 0.65 | 1.25 |        |      |      |      |        |       |      |      |
| 1206L012      |        |      |      |      |        |      |      |      | 0.03   | 0.06 | 0.65 | 1.45 |        |      |      |      |        |       |      |      |
| 1206L016      |        |      |      |      |        |      |      |      | 0.03   | 0.06 | 0.65 | 1.45 |        |      |      |      |        |       |      |      |
| 1206L020      |        |      |      |      |        |      |      |      | 0.02   | 0.04 | 0.50 | 1.00 |        |      |      |      |        |       |      |      |
| 1206L025      |        |      |      |      |        |      |      |      | 0.02   | 0.04 | 0.5  | 1.00 |        |      |      |      |        |       |      |      |
| 1206L035      |        |      |      |      |        |      |      |      | 0.02   | 0.03 | 0.45 | 0.75 |        |      |      |      |        |       |      |      |
| 1206L035/16   |        |      |      |      |        |      |      |      | 0.02   | 0.03 | 0.45 | 0.75 |        |      |      |      |        |       |      |      |
| 1206L035/30   |        |      |      |      |        |      |      |      | 0.02   | 0.04 | 0.50 | 1.00 |        |      |      |      |        |       |      |      |
| 1206L050      |        |      |      |      |        |      |      |      | 0.02   | 0.03 | 0.45 | 0.75 |        |      |      |      |        |       |      |      |
| 1206L050/15   | 0.12   | 0.13 | 3.00 | 3.40 | 0.06   | 0.07 | 1.50 | 1.80 | 0.02   | 0.03 | 0.45 | 0.75 | 0.01   | 0.03 | 0.25 | 0.75 | 0.002  | 0.018 | 0.05 | 0.45 |
| 1206L050/24   |        |      |      |      |        |      |      |      | 0.03   | 0.05 | 0.75 | 1.25 |        |      |      |      |        |       |      |      |
| 1206L075/13.2 |        |      |      |      |        |      |      |      | 0.03   | 0.05 | 0.75 | 1.25 |        |      |      |      |        |       |      |      |
| 1206L075/16   |        |      |      |      |        |      |      |      | 0.03   | 0.05 | 0.75 | 1.25 |        |      |      |      |        |       |      |      |
| 1206L075TH    |        |      |      |      |        |      |      |      | 0.02   | 0.03 | 0.40 | 0.75 |        |      |      |      |        |       |      |      |
| 1206L110TH    |        |      |      |      |        |      |      |      | 0.01   | 0.02 | 0.30 | 0.60 |        |      |      |      |        |       |      |      |
| 1206L110/16   |        |      |      |      |        |      |      |      | 0.03   | 0.05 | 0.75 | 1.25 |        |      |      |      |        |       |      |      |
| 1206L150TH    |        |      |      |      |        |      |      |      | 0.02   | 0.04 | 0.50 | 1.00 |        |      |      |      |        |       |      |      |
| 1206L175      |        |      |      |      |        |      |      |      | 0.03   | 0.08 | 0.80 | 1.80 |        |      |      |      |        |       |      |      |
| 1206L200      |        |      |      |      |        |      |      |      | 0.03   | 0.07 | 0.80 | 1.60 |        |      |      |      |        |       |      |      |

### 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.

### Part Ordering Number System



### Packaging Options

| Part Number   | Ordering Number  | Halogen Free | $I_{hold}$ (A) | $I_{hold}$ Code | Packaging Option | Quantity | Quantity/Pack Code |
|---------------|------------------|--------------|----------------|-----------------|------------------|----------|--------------------|
| 1206L005/60   | 1206L005/60VVR   | Yes          | 0.05           | 050             | Tape and Reel    | 3000     | WR                 |
| 1206L010/60   | 1206L010/60VVR   | Yes          | 0.10           | 100             | Tape and Reel    | 3000     | WR                 |
| 1206L012      | 1206L012WVR      | Yes          | 0.125          | 012             | Tape and Reel    | 3000     | WR                 |
| 1206L016      | 1206L016WVR      | Yes          | 0.16           | 016             | Tape and Reel    | 3000     | WR                 |
| 1206L020      | 1206L020YR       | Yes          | 0.20           | 020             | Tape and Reel    | 4000     | YR                 |
| 1206L025      | 1206L025YR       | Yes          | 0.25           | 025             | Tape and Reel    | 4000     | YR                 |
| 1206L035      | 1206L035YR       | Yes          | 0.35           | 035             | Tape and Reel    | 4000     | YR                 |
| 1206L035/16   | 1206L035/16YR    | Yes          | 0.35           | 035             | Tape and Reel    | 4000     | YR                 |
| 1206L035/30   | 1206L035/30VVR   | Yes          | 0.35           | 350             | Tape and Reel    | 3000     | WR                 |
| 1206L050      | 1206L050YR       | Yes          | 0.50           | 050             | Tape and Reel    | 4000     | YR                 |
| 1206L050/15   | 1206L050/15YR    | Yes          | 0.50           | 050             | Tape and Reel    | 4000     | YR                 |
| 1206L050/24   | 1206L050/24VVR   | Yes          | 0.50           | 500             | Tape and Reel    | 3000     | WR                 |
| 1206L075/13.2 | 1206L075/13.2WVR | Yes          | 0.75           | 075             | Tape and Reel    | 3000     | WR                 |
| 1206L075/16   | 1206L075/16VVR   | Yes          | 0.75           | 075             | Tape and Reel    | 3,000    | WR                 |
| 1206L075TH    | 1206L075THYR     | Yes          | 0.75           | 075             | Tape and Reel    | 4000     | YR                 |
| 1206L110TH    | 1206L110THYR     | Yes          | 1.10           | 110             | Tape and Reel    | 4000     | YR                 |
| 1206L110/16   | 1206L110/16WVR   | Yes          | 1.10           | 110             | Tape and Reel    | 3000     | WR                 |
| 1206L150TH    | 1206L150THWVR    | Yes          | 1.50           | 150             | Tape and Reel    | 3000     | WR                 |
| 1206L175      | 1206L175PR       | Yes          | 1.75           | 175             | Tape and Reel    | 2000     | PR                 |
| 1206L200      | 1206L200PR       | Yes          | 2.00           | 200             | Tape and Reel    | 2000     | PR                 |

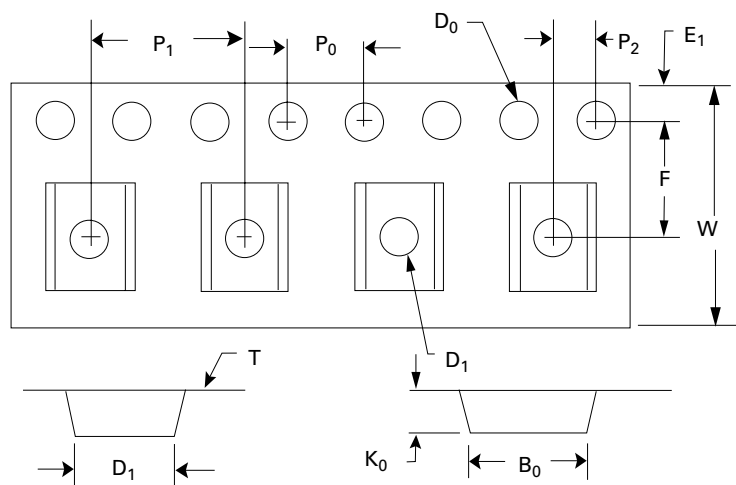
## Tape and Reel Specifications

| TAPE SPECIFICATIONS: EIA-481-1 (mm) |                                                                                                                                   |                                                                                                                                                                       |                                                 |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
|                                     | Packaging Code<br>"YR":<br>1206L020<br>1206L025<br>1206L035<br>1206L035/16<br>1206L050<br>1206L050/15<br>1206L075TH<br>1206L110TH | Packaging Code "WR":<br>1206L005/60<br>1206L010/60<br>1206L012<br>1206L016<br>1206L035/30<br>1206L050/24<br>1206L075/13.2<br>1206L075/16<br>1206L110/16<br>1206L150TH | Packaging Code<br>"PR":<br>1206L175<br>1206L200 |
| W                                   | 8.20+0.10/-0.30                                                                                                                   | 8.15+0.15/-0.30                                                                                                                                                       | 8.20+0.10/-0.30                                 |
| F                                   | 3.50+/-0.05                                                                                                                       | 3.50+/-0.05                                                                                                                                                           | 3.50+/-0.05                                     |
| 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                                                                                                                                                           | 1.55+/-0.05                                     |
| D <sub>1</sub>                      | 1.00+/-0.10                                                                                                                       | 1.00+/-0.10                                                                                                                                                           | 1.00+/-0.10                                     |
| P <sub>0</sub>                      | 4.00+/-0.10                                                                                                                       | 4.00+/-0.10                                                                                                                                                           | 4.00+/-0.10                                     |
| P <sub>1</sub>                      | 4.00+/-0.10                                                                                                                       | 4.00+/-0.10                                                                                                                                                           | 4.00+/-0.10                                     |
| P <sub>2</sub>                      | 2.00+/-0.05                                                                                                                       | 2.00+/-0.05                                                                                                                                                           | 2.00+/-0.05                                     |
| A <sub>0</sub>                      | 1.95+/-0.10                                                                                                                       | 1.92+/-0.10                                                                                                                                                           | 1.95+/-0.10                                     |
| B <sub>0</sub>                      | 3.65+/-0.10                                                                                                                       | 3.65+/-0.10                                                                                                                                                           | 3.65+/-0.10                                     |
| T                                   | 0.20+/-0.10                                                                                                                       | 0.25+/-0.10                                                                                                                                                           | 0.25+/-0.10                                     |
| K <sub>0</sub>                      | 0.87+/-0.10                                                                                                                       | 1.30+/-0.10                                                                                                                                                           | 1.70+/-0.10                                     |
| Leader min.                         | 390                                                                                                                               | 390                                                                                                                                                                   | 390                                             |
| Trailer min.                        | 160                                                                                                                               | 160                                                                                                                                                                   | 160                                             |

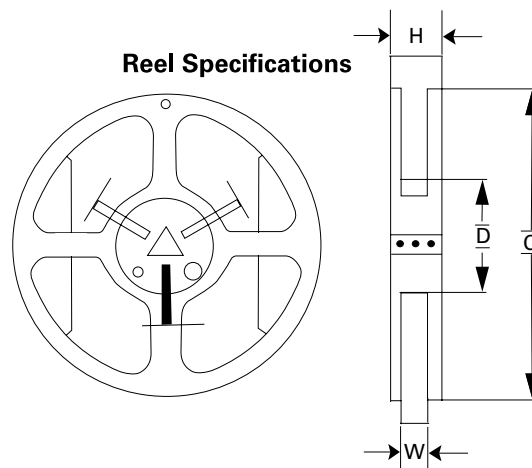
## REEL DIMENSIONS: EIA-481-1 (mm)

|   |             |
|---|-------------|
| C | Ø178+/-1.0  |
| D | Ø60.2+/-0.5 |
| H | 11.0+/-0.5  |
| W | 9.0+/-1.5   |

### Tape Specifications



### Reel Specifications



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