| | | | | |
|---|---|---|---|---|
| | Junction Temperature | $T_j$ | 125 | |
| | Output Power Dissipation | $P_O$ | 250 | mW |
| | Power Dissipation Derating ($T_a$ 125 ) | •P D/ | -3.33 | mW/ |
| Total Power Dissipation | | $P_{tot}$ | 350 | mW |
| Isolation Voltage | | $V_{iso}$ | 5000 ' | Vrms |
| Operating Temperature | | $T_{opr}$ | -55~100 | |
| Storage Temperature | | $T_{stg}$ | -55~125 | |
| Soldering Temperature | | $T_{sol}$ | 260 8 | |

**NOTE1** ( } Œ í u ] v µ š U Z X , X A ð ì • ò ì 9

**NOTE2** & } Œ í ì • } v •

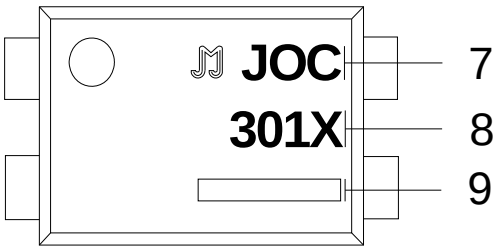
## ELECTRICAL CHARACTERISTICS (Temperature=25°C)

| Parameter | | Symbol | Condition | Min. | Typ. | Max. | Unit |
|---|---|---|---|---|---|---|---|
| Input | Forward Voltage | $V_F$ | $I_F$=10mA | - | 1.24 | 1.4 | V |
| | Reverse Current | $I_R$ | $V_R$=6V | - | - | 1 | μA |
| | Input Capacitance | $C_{in}$ | V=0, f=1kHz | - | 10 | - | pF |
| Output | Peak Off-state Current, Either Direction | $I_{OFF}$ | $V_{OFF}$=250V, $I_F$=0 | - | - | 100 " | nA |
| | Peak On-state Voltage, Either Direction | $V_{TM}$ | $I_{TM}$=100mA | - | 1.8 | 2.5 | V |
| | Critical Rate of Rise of Off-state voltage | dV/dt | $V_{PEAK}$=250V, $I_F$=0 | 1000 • | - | - | V/μs |

Transfer

## ORDERING AND MARKING INFORMATION

### MARKING INFORMATION




7 : Company Abbr.
8 : Part Number & Rank
9 : Production Information Code

## Characteristics Curves

**FIG.1:** Forward Current vs. Ambient Temperature

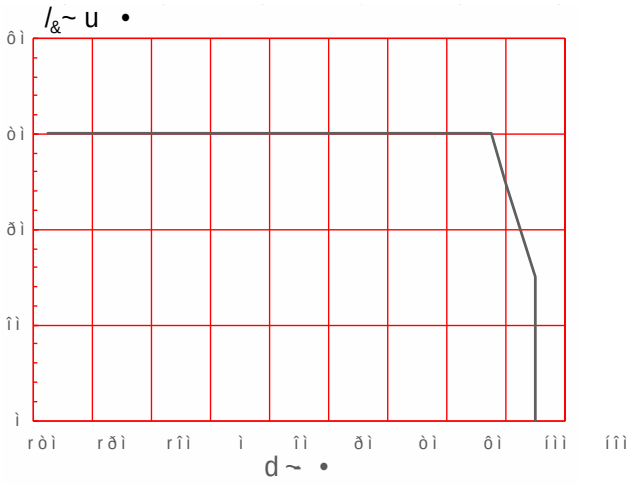



**FIG.2:** On-state Terminal Current vs. Ambient Temperature

**FIG.7:** Normalized On-state Terminal Voltage vs. Ambient Temperature

## TEST CIRCUITS

**FIG.12:** Test Circuits of Turn On Time

**FIG.13:** Waveforms of Turn On Time

**Fig.14: Test Circuits of dV/dt**

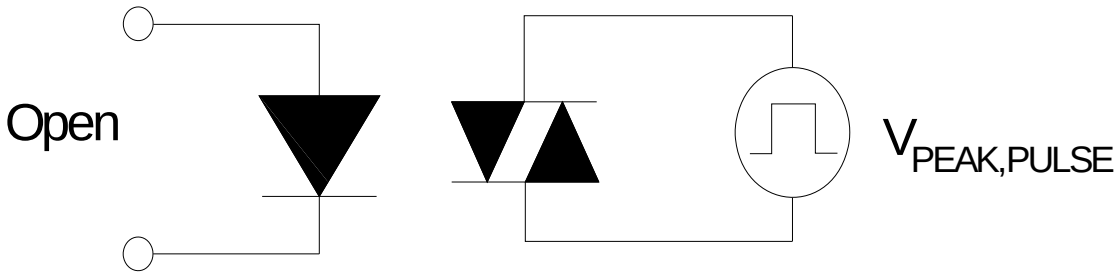
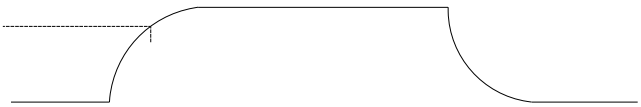
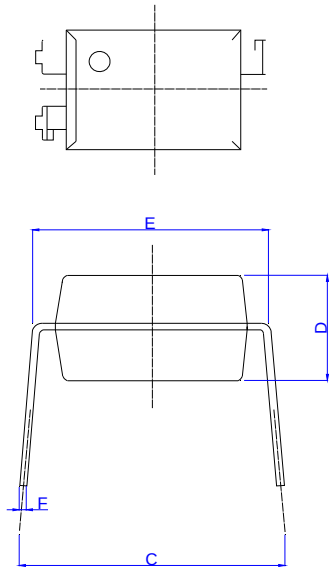



**Fig.15: Waveforms of dV/dt**



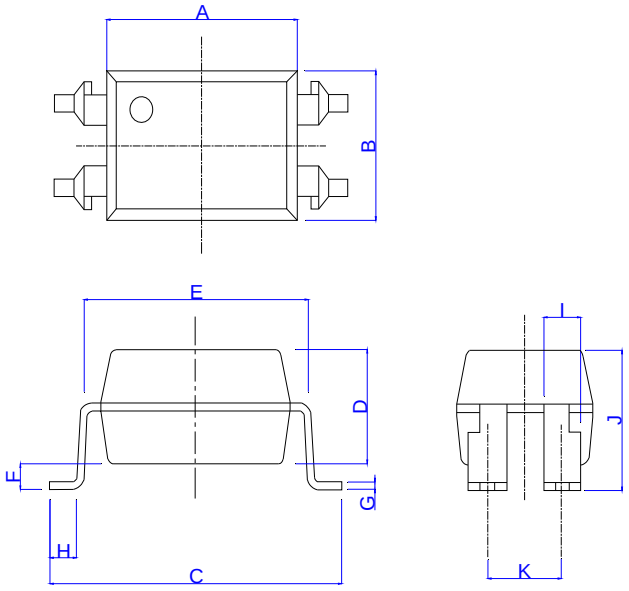
## Package Dimension (Unit: mm Å

**Standard DIP Type:**



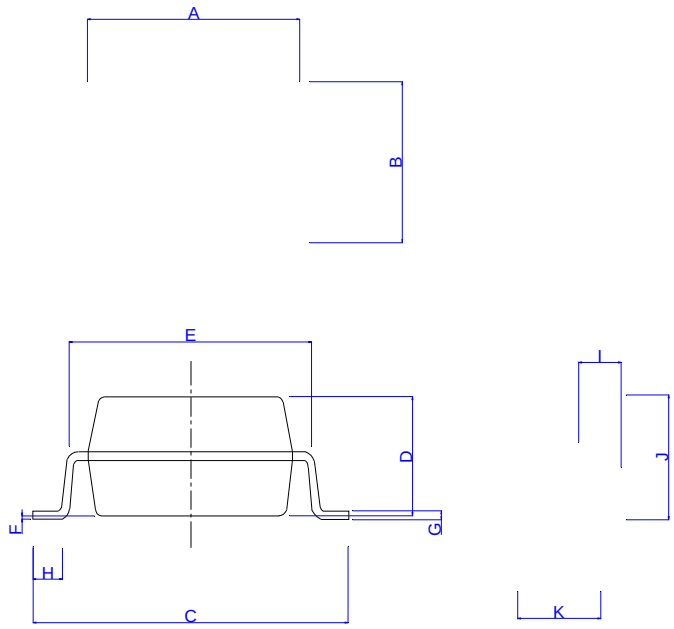

2.80

## Option S Type:




| Ref. | Dimensions | | | | | |
|---|---|---|---|---|---|---|
| | Millimeters | | | Inches | | |
| | Min. | Typ. | Max. | Min. | Typ. | Max. |
| A | 6.30 | | 6.70 | 0.249 | | 0.265 |
| B | 4.38 | | 4.78 | 0.173 | | 0.189 |
| C | 9.85 | | 10.45 | 0.389 | | 0.413 |
| D | 3.30 | | 3.70 | 0.130 | | 0.146 |
| E | 7.32 | | 7.92 | 0.289 | | 0.313 |
| F | | 0.80 | | | 0.032 | |
| G | | 0.25 | | | 0.010 | |
| H | | 0.80 | | | 0.032 | |
| I | 1.20 | | 1.40 | 0.047 | | 0.055 |
| J | 4.00 | | 4.60 | 0.158 | | 0.182 |
| K | | 2.54 | | | 0.100 | |

## Option SL Type:

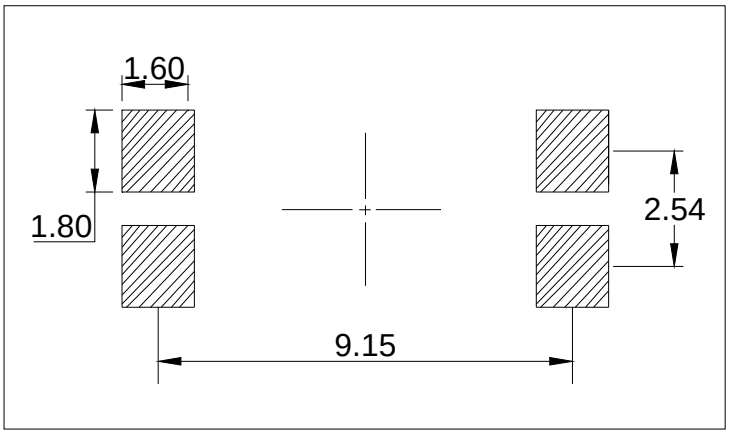



| Ref. | Dimensions | | | | | |
|---|---|---|---|---|---|---|
| | Millimeters | | | Inches | | |
| | Min. | Typ. | Max. | Min. | Typ. | Max. |
| A | 6.30 | | 6.70 | 0.249 | | 0.265 |
| B | 4.38 | | 4.78 | 0.274 | | 0.289 |
| C | 9.85 | | 10.45 | 0.389 | | 0.413 |
| E | 7.32 | | 7.92 | 0.289 | | 0.313 |
| G | | | | | | |
| I | 1.20 | | 1.40 | 0.047 | | |
| K | | | | | | |

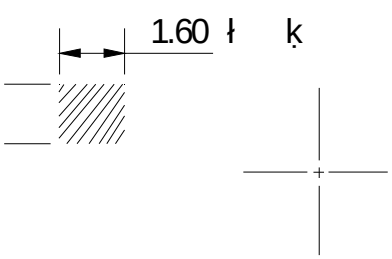
0 1.40 0.

## RECOMMENDED SOLDER MASK (Dimensions in mm unless otherwise stated)

**Option S/SL**

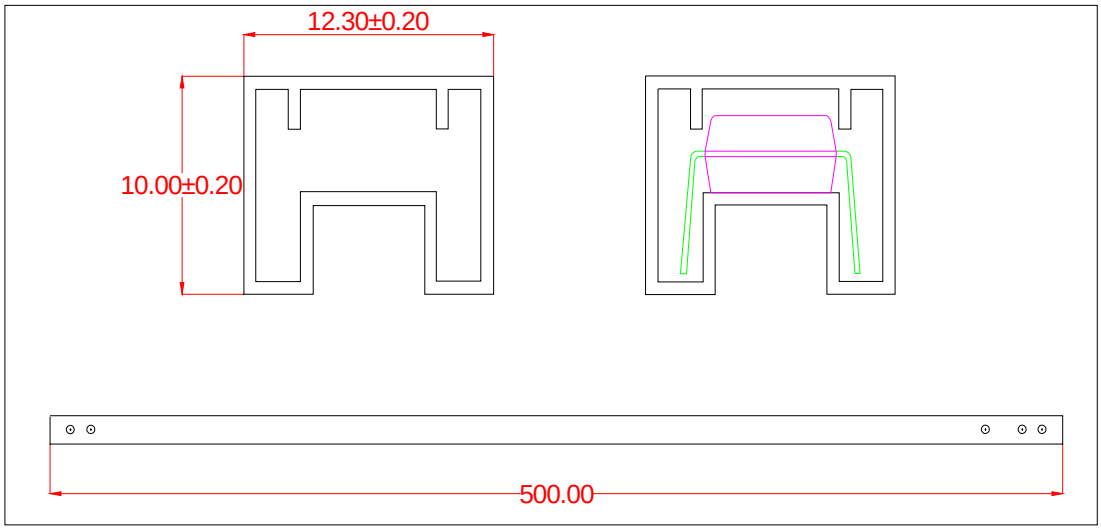



**Option SLM**

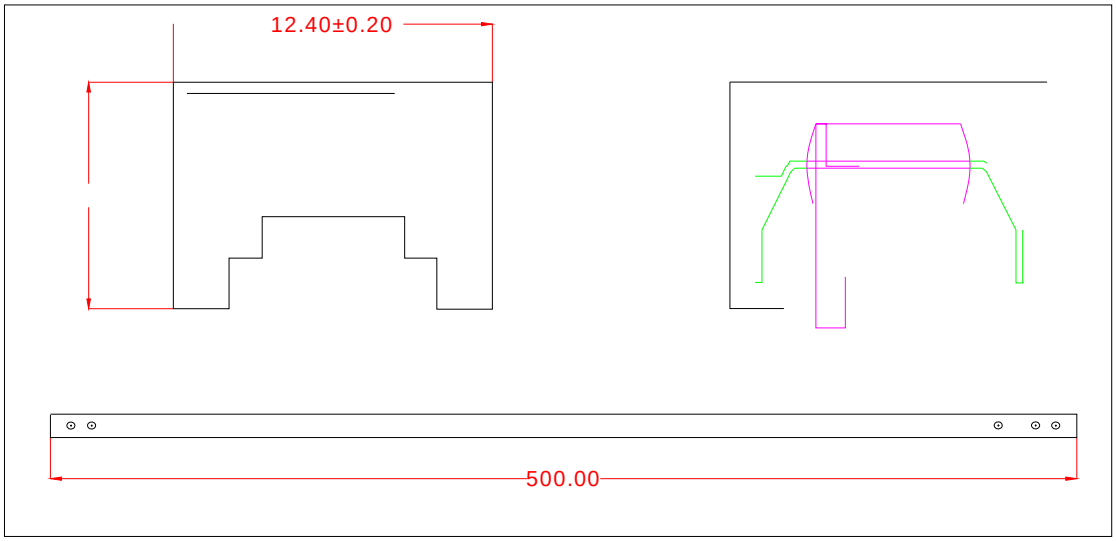


## TUBE SPECIFICATIONS (Dimensions in mm unless otherwise stated)

### Standard DIP




### Option M



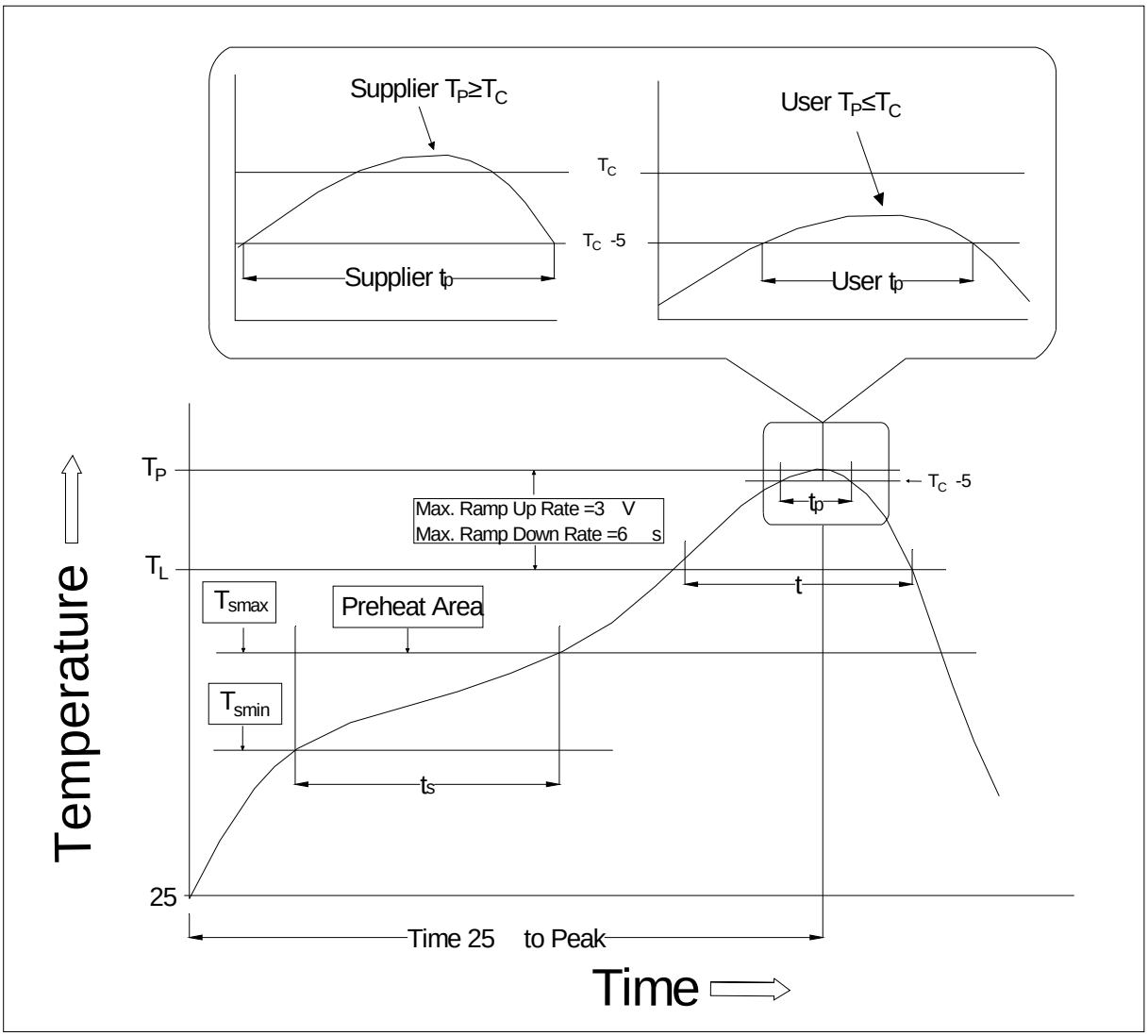
## CARRIER TAPE SPECIFICATIONS (Dimensions in mm unless otherwise stated)

### Option S



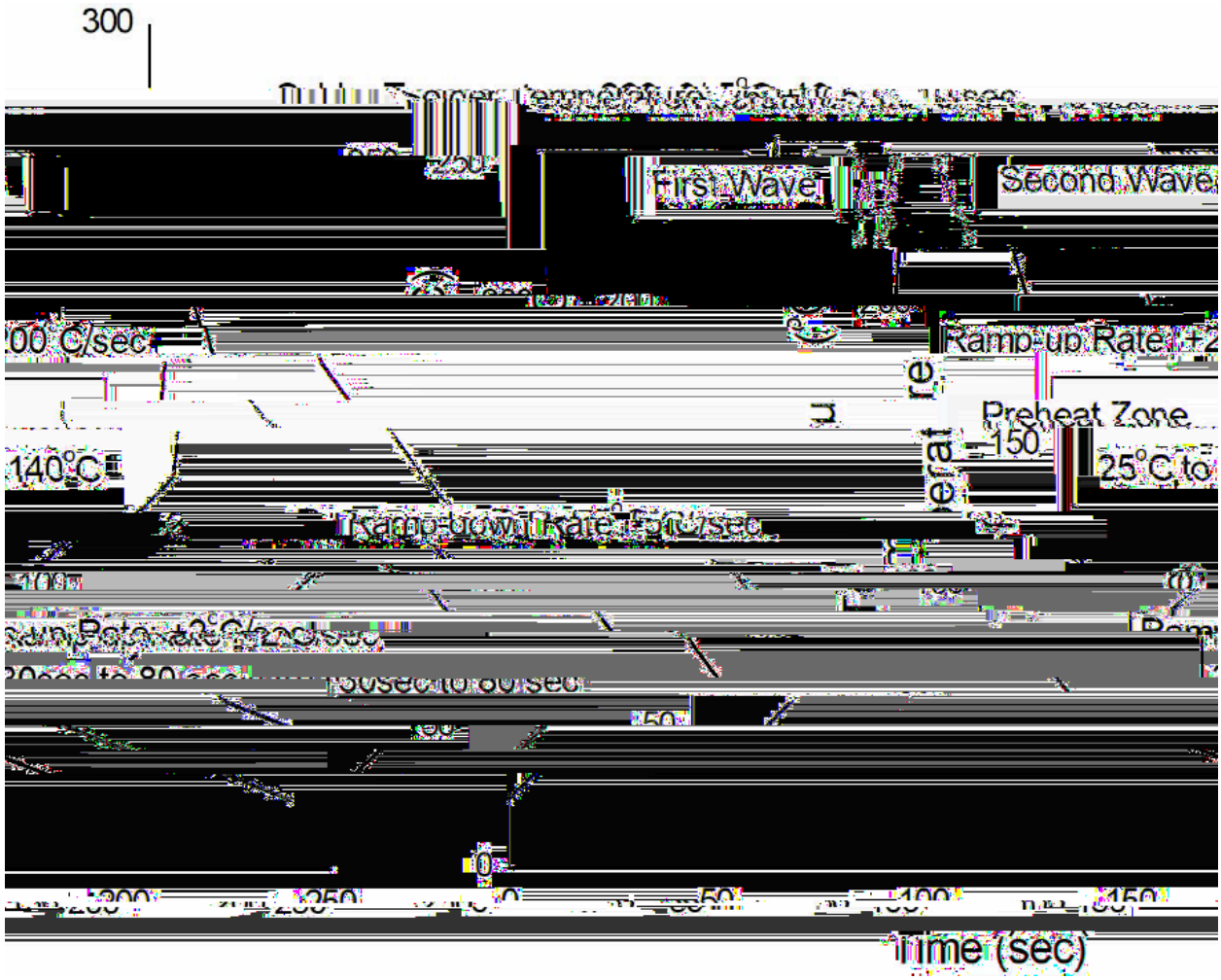
| Ref. | Dimensions | | | | | |
|---|---|---|---|---|---|---|
| | Millimeters | | | Inches | | |
| | Min. | Typ. | Max. | Min. | Typ. | Max. |
| D0 | | 1.50 | | | 0.059 | |
| P0 | | 4.00 | | | 0.157 | |
| P1 | | 8.00 | | | 0.315 | |
| P2 | | 2.00 | | | 0.079 | |
| E | | 1.75 | | | 0.069 | |
| F | | 7.50 | | | 0.295 | |
| T | | 0.40 | | | 0.016 | |
| W | | 16.00 | | | 0.630 | |

## REFLOW INFORMATION




| Profile Feature | Sn-Pb Assembly Profile | Pb-Free Assembly Profile |
|---|---|---|
| Temperature Min. (Tsmin) | 100 | 150 |
| Temperature Max. (Tsmax) | 150 | 200 |
| Time (ts) from (Tsmin to Tsmax) | 60-120 seconds | 60-120 seconds |
| Ramp-up Rate (tL to tP) | 3 /second max. | 3 /second max. |
| Liquidus Temperature (TL) | 183 | 217 |
| Time (tL) Maintained Above (TL) | 60-150 seconds | 60-150 seconds |
| Peak Body Package Temperature | 235 +0 /-5 | 260 +0 /-5 |
| Time (tP) within 5 of 260 | 10 seconds | 10 seconds |
| Ramp-down Rate (TP to TL) | 3-6 /second | 3-6 /second |
| Time 25 to Peak Temperature | 6 minutes max. | 8 minutes max. |

## WAVE SOLDERING




| HAND SOLDERING BY SOLDERING IRON | |
|---|---|
| Soldering Temperature | 360 f5 |
| Soldering Time | 3s max. |

Note:

1. Reflow soldering is recommended at the temperatures and times shown, no more than three times.

2. Avoid direct contact between the epoxy body and any tools or surfaces exceeding its maximum storage temperature.

3. Application of pressure on the epoxy body is prohibited at elevated temperatures. In specific scenarios, any applied force must not exceed 2.5N.

4. Ensure the component has cooled to ambient temperature before proceeding with any subsequent manufacturing steps.

5. The component has a shelf life of one year when stored under standard conditions.

6. Recommend storage Temp.: 0~40°C;

Recommend storage humidity: <60%;

MSL level: MSL 1

Information furnished in this document is believed to be accurate and relia t¢ a Î Mæo