

**BRES**D24V0M2B3MA

/ Absolute Maximum Ratings( $T_a=25^\circ\text{C}$ )

| Parameter                                      | Symbol     | Rating      | Unit |
|------------------------------------------------|------------|-------------|------|
| Peak Pulse Power ( $t_p = 8/20\mu\text{s}$ )   | $P_{PP}$   | 350         | W    |
| Peak Pulse Current ( $t_p = 8/20\mu\text{s}$ ) | $I_{PP}$   | 8.0         | A    |
| ESD per IEC 61000-4-2 (Air)                    | $V_{ESD1}$ | $\pm 30$    | kV   |
| ESD per IEC 61000-4-2 (Contact)                | $V_{ESD2}$ | $\pm 30$    | kV   |
| Operating Temperature                          | $T_{OPR}$  | -55 to +150 |      |
| Storage Temperature                            | $T_{STG}$  | -55 to +150 |      |

/ Electrical Characteristics( $T_a=25^\circ\text{C}$ )

| Parameter                       | Symbol    | Test Conditions                            | Min  | Typ | Max | Unit          |
|---------------------------------|-----------|--------------------------------------------|------|-----|-----|---------------|
| Reverse Stand-Off Voltage       | $V_{RWM}$ |                                            |      |     | 24  | V             |
| Reverse Breakdown Voltage       | $V_{BR}$  | $I_t=1\text{mA}$                           | 26.7 |     |     | V             |
| Reverse Leakage Current         | $I_R$     | $V_{RWM}=24\text{V}$ $T=25^\circ\text{C}$  |      |     | 1   | $\mu\text{A}$ |
| Clamping Voltage                | $V_C$     | $I_{PP}=1.0\text{A}$ $t_p=8/20\mu\text{S}$ |      |     | 33  | V             |
|                                 | $V_C$     | $I_{PP}=8.0\text{A}$ $t_p=8/20\mu\text{S}$ |      |     | 44  | V             |
| Capacitance. Any I/O pin to GND | $C_J$     | $V_R=0\text{V}$ $f=1\text{MHz}$            |      | 25  | 30  | pF            |

/ Electrical Characteristic Curve

Fig.1 Non-Repetitive Pulse Power vs.Pulse Time

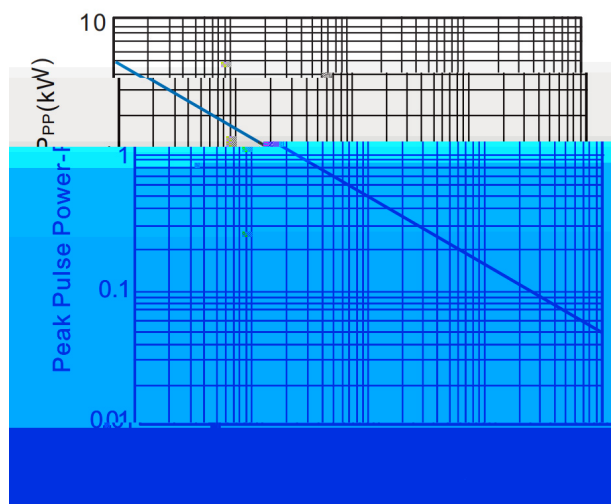
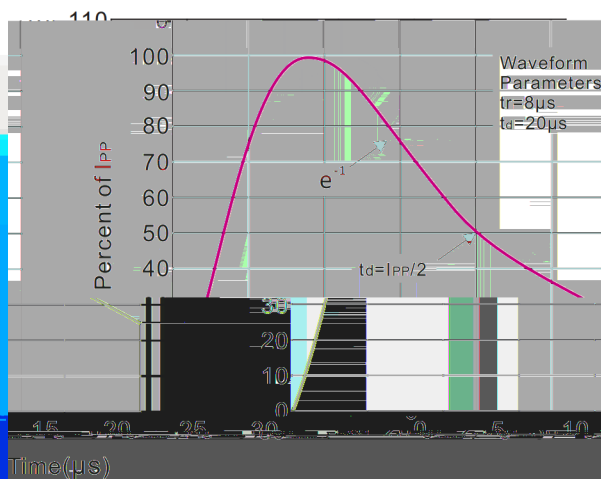


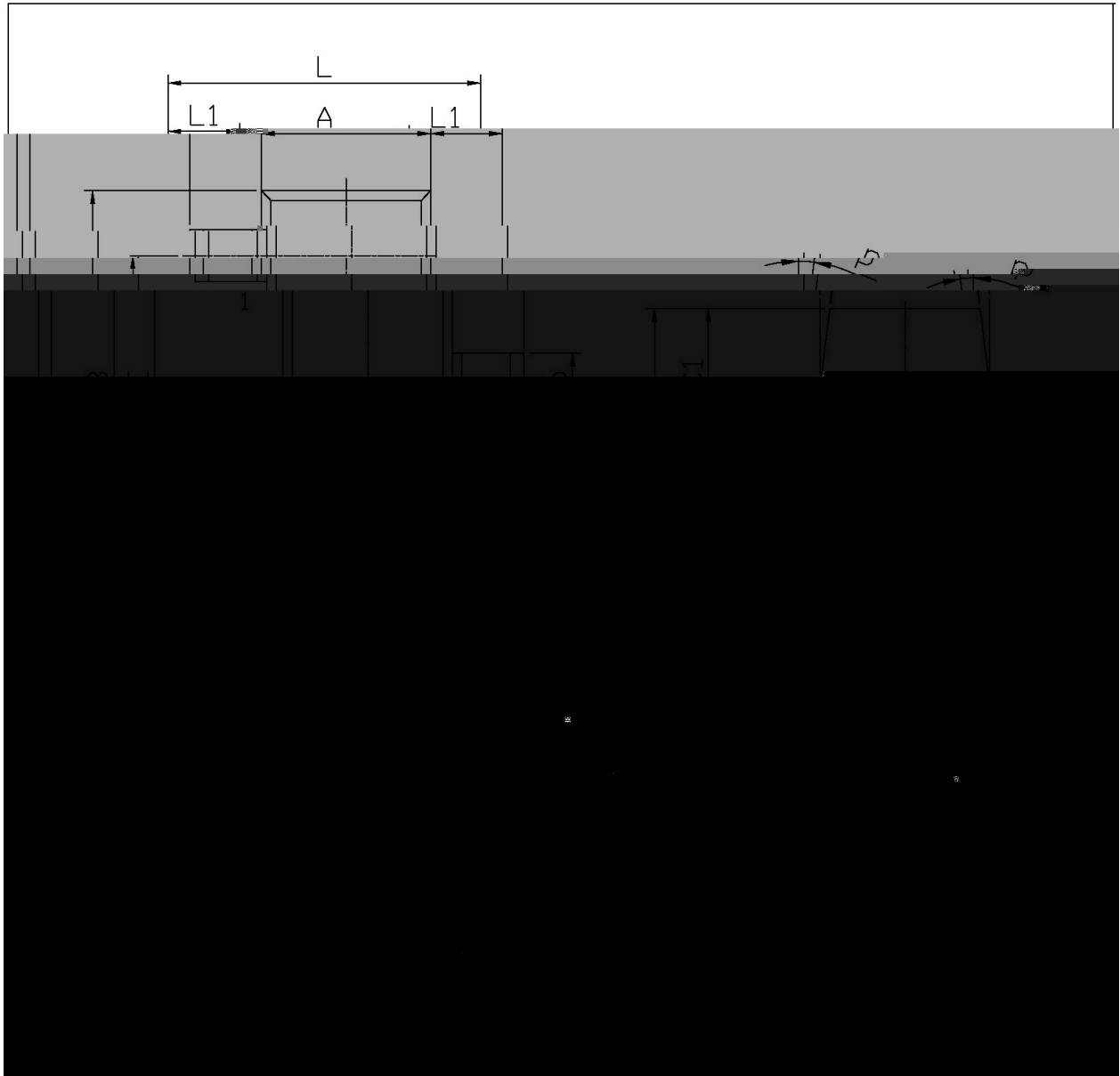
Fig.2 Pulse Waveform



/ Package Dimensions

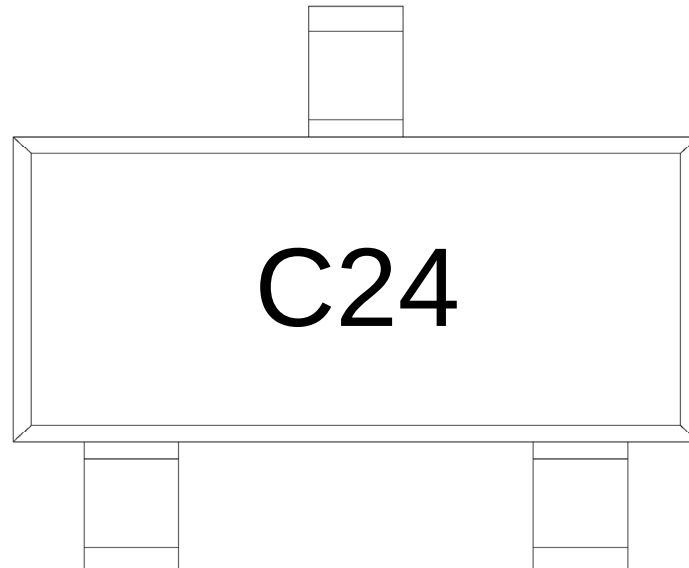
SOT-23

单位: mm





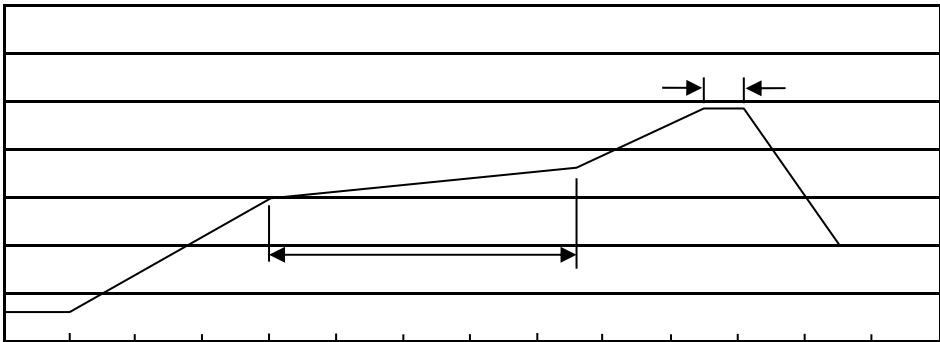
**/ Marking Instructions**



Note:

C24:      Product Type Code

( ) / Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

- 1

150 180

60 90sec;

1.Preheating:150~180 , Time:60~90sec.
- 2

245 5

5 0.5sec;

2.Peak Temp.:245 5 , Duration:5 0.5sec.
- 3

2 10

/sec.

3. Cooling Speed: 2~10 /sec.

/ Resistance to Soldering Heat Test Conditions

260 5                      10 1 sec.                      Temp.:260±5                      Time:10±1 sec

/ Packaging SPEC.

/ REEL

| Package Type | Units      |                 |                 |                       |                 | Dimension (unit mm <sup>3</sup> ) |             |             |
|--------------|------------|-----------------|-----------------|-----------------------|-----------------|-----------------------------------|-------------|-------------|
|              | Units/Reel | Reels/Inner Box | Units/Inner Box | Inner Boxes/Outer Box | Units/Outer Box | Reel                              | Inner Box   | Outer Box   |
| SOT-23       | 3,000      | 10              | 30,000          | 6                     | 180,000         | 7 ×8                              | 180×120×180 | 390×385×205 |

/ Notices