

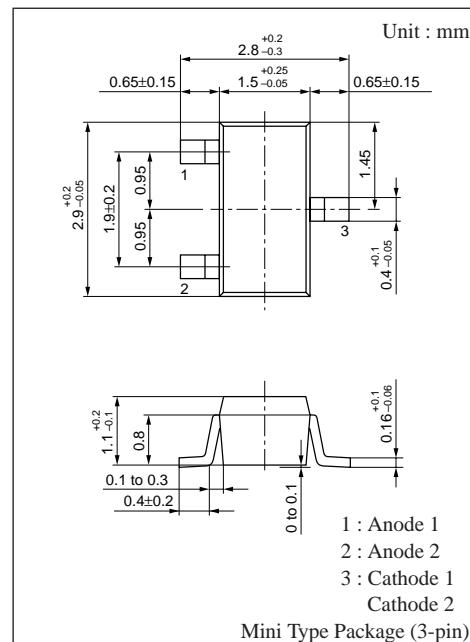
MA3100WK

Silicon planer type

Constant voltage, constant current, waveform
clipper and surge absorption circuit

■ Features

- Mini type package (3-pin)
- Two cathode-common wiring of MA3100



■ Absolute Maximum Ratings (Ta= 25°C)

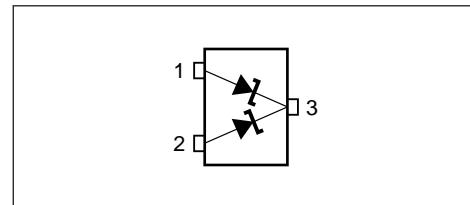
| Parameter | Symbol | Rating | Unit |
|--|---------------------------------|--------------------|------|
| Average forward current | I _{F(AV)} | 100 * ¹ | mA |
| Instantaneous forward current | I _{FRM} | 200 * ¹ | mA |
| Total power dissipation | P _{tot} * ² | 100 * ¹ | mW |
| Non-repetitive reverse surge power dissipation | P _{ZSM} * ³ | 15 | W |
| Junction temperature | T _j | 150 | °C |
| Storage temperature | T _{stg} | - 55 to + 150 | °C |

*¹ Working value in a single piece

*² With a printed-circuit board

*³ t=100μ s, T_j=150°C

■ Internal Connection



■ Electrical Characteristics (Ta= 25°C)*¹

| Parameter | Symbol | Condition | min | typ | max | Unit |
|--|-------------------------------|------------------------|------|-----|-------|-------|
| Forward voltage | V _F | I _F =10mA | | 0.8 | 0.9 | V |
| Zener voltage | V _Z * ² | I _Z = 5mA | 9.40 | | 10.60 | V |
| Operating resistance | R _{ZK} | I _Z = 0.5mA | | | 130 | Ω |
| | R _Z | I _Z = 5mA | | | 20 | Ω |
| Reverse current | I _{R1} | V _R = 7.0V | | | 0.2 | μA |
| | I _{R2} | V _R = 8.9V | | | 60 | μA |
| Temperature coefficient of zener voltage | S _Z * ³ | I _Z = 5mA | 4.5 | 6.4 | 8.0 | mV/°C |

Note 1. Rated input/output frequency : 5MHz

2. *¹ : The V_Z value is for the temperature of 25°C. In other cases, carry out the temperature compensation.

*² : Guaranteed at 20ms after power application

*³ : T_j= 25 to 150°C

■ Marking



