## FEATURES

- High transient reverse power capability suitable for protecting automobile electronic components etc.
- Axial lead type easy mounting on PC board.


## OUTLINE DRAWING



ABSOLUTE MAXIMUM RATINGS

| Items | Symbols | Units | Ratings |
| :--- | :---: | :---: | :---: |
| Non-Repetitive Peak Reverse One- <br> Cycle Dissipation | $\mathrm{P}_{\mathrm{RSM}}$ | W | 3,000 (Rectangular pulse $\mathrm{t}=1 \mathrm{~ms}_{\mathrm{T}}^{\mathrm{i}} \mathrm{=} 25^{\circ} \mathrm{C}$ start) |
| Non-Repetitive Peak Reverse Surge Current | $\mathrm{I}_{\mathrm{RSM}}$ | A | 62 (Time constant $=14.5 \mathrm{~ms}, \mathrm{~L}=10 \mathrm{~mm}, \mathrm{~T}_{\mathrm{L}}=25^{\circ} \mathrm{C}$ ) |
| DC Reverse Voltage | $\mathrm{V}_{\mathrm{DC}}$ | V | 18 |
| Operating Junction Temperature | $\mathrm{T}_{\mathrm{j}}$ | ${ }^{\circ} \mathrm{C}$ | $-40 \sim+150$ |
| Storage Temperature | $\mathrm{T}_{\text {stg }}$ | ${ }^{\circ} \mathrm{C}$ | $-40 \sim+150$ |

Notes (1) Lead mounting : Lead temperature $300^{\circ} \mathrm{C}$ max. to 10 mm from body for 5 sec . max..
(2) Mechanical strength : Bending $90^{\circ} \times 2$ cycles or $180^{\circ} \times 1$ cycle, Tensile 3 kg , Twist $90^{\circ} \times 1$ cycle.

CHARACTERISTICS $\left(\mathrm{T}_{\mathrm{L}}=25^{\circ} \mathrm{C}\right)$

| Items | Symbols | Units | Min. | Typ. | Max. | Test Conditions |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Zener Voltage | Vz | V | 24 | 27 | 30 | $\mathrm{Iz}=10 \mathrm{~mA}$ |
| Dynamic Impedance | Zz | $\Omega$ | - | - | 50 | $\mathrm{Iz}=10 \mathrm{~mA}$ |
| Zener Voltage Temperature Coefficient | $\gamma_{z}$ | $\% /{ }^{\circ} \mathrm{C}$ | - | 0.074 | - | $\mathrm{Iz}=10 \mathrm{~mA}$ |
| Peak Forward Voltage | $\mathrm{V}_{\mathrm{FM}}$ | V | - | - | 2 | $\mathrm{I}_{\mathrm{FM}}=6 \mathrm{~A}$ |
| Peak Reverse Current | $\mathrm{I}_{\text {RRM }}$ | $\mu \mathrm{A}$ | - | - | 50 | $\mathrm{~V}_{\mathrm{R}}=18 \mathrm{~V}$ |

Typical zener characteristics


Typical reverse power characteristic
(Rectangular pulse non-repetitive)


## HITACHI POWER SEMICONDUCTORS

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