## 2Z12~2Z51

## CONSTANT VOLTAGE REGULATION

 TRANSIENT SUPPRESSORS- Average Power Dissipation : $\mathrm{P}=1.5 \mathrm{~W}$
- Peak Reverse Power Dissipation

$$
: \mathrm{P}_{\mathrm{RSM}}=900 \mathrm{~W} \text { at } \mathrm{t}_{\mathrm{w}}=200 \mu \mathrm{~s}
$$

- Zener Voltage : VZ=12~51V
- Plastic Mold Package


## MARK



MAXIMUM RATINGS $\left(\mathbf{T a}=\mathbf{2 5}{ }^{\circ} \mathrm{C}\right)$

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
| :--- | :---: | :---: | :---: |
| Power Dissipation | P | 1.5 | W |
| Junction Temperature | $\mathrm{T}_{\mathrm{j}}$ | $-40 \sim 150$ | ${ }^{\circ} \mathrm{C}$ |
| Storage Temperature Range | $\mathrm{T}_{\mathrm{stg}}$ | $-40 \sim 150$ | ${ }^{\circ} \mathrm{C}$ |

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[^0]ELECTRICAL CHARACTERISTICS ( $\mathrm{Ta}=\mathbf{2 5}{ }^{\circ} \mathrm{C}$ )

| TYPE | ZENER CHARACTERISTICS |  |  |  |  | TEMPERATURE COEFFICIENT OF ZENER VOLTAGE $\alpha_{\top}\left(\mathrm{mV} /{ }^{\circ} \mathrm{C}\right)$ |  | FORWARD VOLTAGE |  | REVERSE CURRENT |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ZENER VOLTAGEVZ (V) |  |  | ZENER IMPEDANCE <br> $r_{d}(\Omega)$ | MEASUREMENT CURRENT IZ (mA) |  |  | $V_{F}(V)$ | MEASUREMENT CURRENT $I_{F}(A)$ | IR ( $\mu \mathrm{A}$ ) <br> MAX | MEASUREMENT VOLTAGE $\mathrm{V}_{\mathrm{R}}(\mathrm{V})$ |
|  | MIN. | TYP. | MAX. | MAX. |  | TYP. | MAX | MAX. |  |  |  |
| $2 \mathrm{Z12}$ | 10.8 | 12 | 13.2 | 30 | 10 | 8 | 13 | 1.2 | 0.2 | 5 | 10.2 |
| $2 \mathrm{Z13}$ | 11.7 | 13 | 14.3 | 30 | 10 | 9 | 14 | 1.2 | 0.2 | 5 | 11.1 |
| $2 \mathrm{Z15}$ | 13.5 | 15 | 16.5 | 30 | 10 | 11 | 17 | 1.2 | 0.2 | 5 | 12.8 |
| $2 \mathrm{Z16}$ | 14.4 | 16 | 17.6 | 30 | 10 | 12 | 19 | 1.2 | 0.2 | 5 | 13.6 |
| *2Z16A | 15.2 | 16 | 16.8 | 30 | 10 | 12 | 19 | 1.2 | 0.2 | 5 | 13.6 |
| $2 \mathrm{Z18}$ | 16.2 | 18 | 19.8 | 30 | 10 | 14 | 23 | 1.2 | 0.2 | 5 | 15.3 |
| *2Z18A | 17.1 | 18 | 18.9 | 30 | 10 | 14 | 23 | 1.2 | 0.2 | 5 | 15.3 |
| 2Z20 | 18.0 | 20 | 22.0 | 30 | 10 | 16 | 26 | 1.2 | 0.2 | 5 | 17.1 |
| $2 \mathrm{Z22}$ | 19.8 | 22 | 24.2 | 30 | 10 | 18 | 28 | 1.2 | 0.2 | 5 | 18.8 |
| $2 \mathrm{Z24}$ | 21.6 | 24 | 26.4 | 30 | 10 | 20 | 32 | 1.2 | 0.2 | 5 | 20.5 |
| $2 \mathrm{Z27}$ | 24.3 | 27 | 29.7 | 30 | 10 | 23 | 36 | 1.2 | 0.2 | 5 | 23.1 |
| *2Z27A | 25.7 | 27 | 28.3 | 30 | 10 | 23 | 36 | 1.2 | 0.2 | 5 | 23.1 |
| 2Z30 | 27.0 | 30 | 33.0 | 30 | 10 | 25 | 40 | 1.2 | 0.2 | 5 | 25.6 |
| $2 \mathrm{Z33}$ | 29.7 | 33 | 36.3 | 30 | 10 | 26 | 41 | 1.2 | 0.2 | 5 | 28.2 |
| 2Z36 | 32.4 | 36 | 39.6 | 30 | 9 | 28 | 45 | 1.2 | 0.2 | 5 | 30.8 |
| $2 \mathrm{Z43}$ | 38.7 | 43 | 47.3 | 40 | 7 | 33 | 53 | 1.2 | 0.2 | 5 | 34.4 |
| 2Z47 | 42.3 | 47 | 51.7 | 65 | 6 | 38 | 60 | 1.2 | 0.2 | 5 | 40.2 |
| $2 \mathrm{Z51}$ | 45.9 | 51 | 56.1 | 65 | 6 | 43 | 68 | 1.2 | 0.2 | 5 | 43.6 |

Note: * Production upon request.


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