## SURFACE MOUNT SWITCHING DIODES

| VOLTAGE 100 Volts POWER 350 mWatts |
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| FEATURES |

- Fast switching speed.
- Surface mount package Ideally Suited for Automatic insertion
- Electrically Identical to Standard JEDEC
- High Conductance
- Pb free product are available : Pb free $99 \%$ Sn above can meet Rohs environment substance directive request


## MECHANICALDATA

Case: SOT-23, Plastic
Terminals: Solderable per MIL-STD-202G, Method 208
Approx. Weight: 0.008 gram
Marking Code: A6


## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at $25^{\circ} \mathrm{C}$ ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz , resistive or inductive load.
For capacitive load, derate current by $20 \%$.

| PARAMETER | SYMBOL | BAS16 | UNITS |
| :---: | :---: | :---: | :---: |
| Reverse Voltage | VR | 75 | V |
| Peak Reverse Voltage | VRm | 100 | V |
| Rectified Current (Average), Half Wave Rectification with Resistive Load and $\mathrm{f}>=50 \mathrm{~Hz}$ | lo | 250 | mA |
| Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | IFSM | 2 | A |
| Power Dissipation Derate Above $25^{\circ} \mathrm{C}$ | Рtot | 350 | mW |
| Maximum Forward Voltage @ IF=0.01A | $V_{F}$ | 0.855 | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage $\mathrm{T}=25^{\circ} \mathrm{C}$ | IR | 1 | uA |
| Typical Junction Capacitance( Notes1) | CJ | 2 | pF |
| Maximum Reverse Recovery (Notes2) | TRR | 6 | ns |
| Maximum Thermal Resistance | R $\theta \mathrm{JA}$ | 357 | ${ }^{\circ} \mathrm{C} / \mathrm{W}$ |
| Storage Temperature Range | TJ | -55 TO +125 | ${ }^{\circ} \mathrm{C}$ |

## NOTE:

1. $C J$ at $V_{R}=0, f=1 M H Z$
2. From $\mathrm{IF}_{\mathrm{F}}=10 \mathrm{~mA}$ to $\mathrm{I}_{\mathrm{R}}=1 \mathrm{~mA}, \mathrm{~V}_{\mathrm{R}}=6 \mathrm{Volts}, \mathrm{R}=100 \Omega$



## MOUNTING PAD LAYOUT



## ORDER INFORMATION

- Packing information

> T/R - 12 K per 13 " plastic Reel
> T/R -3.0 K per 7 " plastic Reel

## LEGAL STATEMENT

## IMPORTANT NOTICE

This information is intended to unambiguously characterize the product in order to facilitate the customer's evaluation of the device in the application. The information will help the customer's technical experts determine that the device is compatible and interchangeable with similar devices made by other vendors. The information in this data sheet is believed to be reliable and accurate. The specifications and information herein are subject to change without notice. New products and improvements in products and product characterization are constantly in process. Therefore, the factory should be consulted for the most recent information and for any special characteristics not described or specified.

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