

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- High Switching Speed
- Very Small Plastic Package

SOD-323

MARKING

A6

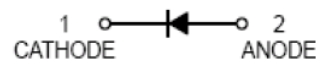


PACKAGE INFORMATION

| Package | MPQ | Leader Size |
|---------|-----|-------------|
| SOD-323 | 3K | 7 inch |

ORDER INFORMATION

| Part Number | Type |
|-------------|---------------------------------|
| BAS316-C | Lead (Pb)-free and Halogen-free |



ABSOLUTE MAXIMUM RATINGS (T_A=25°C unless otherwise specified)

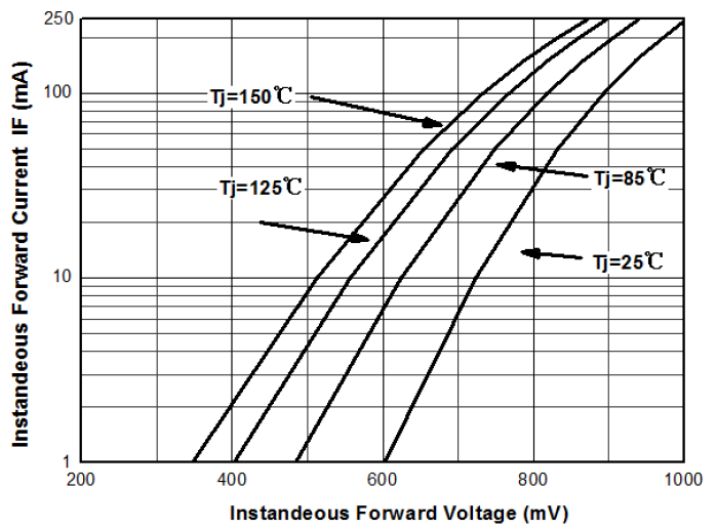
| Parameter | Symbol | Ratings | Unit |
|---|-----------------------------------|--------------|------|
| Non-Repetitive Peak Reverse Voltage | V _{RSM} | 100 | V |
| Repetitive Peak Reverse Voltage | V _{RRM} | 100 | |
| Repetitive Peak Forward Current | I _{FRM} | 300 | mA |
| Non-Repetitive Peak Forward Surge Current | t=1μs | 4 | A |
| | t=1ms | 1 | |
| | t=1s | 0.5 | |
| Continuous Forward Current | I _F | 250 | mA |
| Power Dissipation | P _D | 200 | mW |
| Junction, Storage Temperature Range | T _J , T _{STG} | 150, -55~150 | °C |

ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise specified)

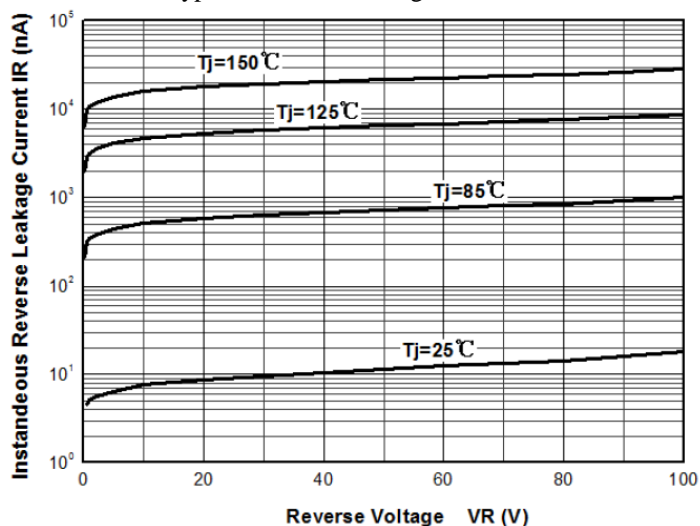
| Parameters | Symbol | Min. | Typ. | Max. | Unit | Test Conditions | |
|---------------------------|-------------------|------|------|-------|------|---|----------------------|
| Reverse Breakdown Voltage | V _(BR) | 100 | - | - | V | I _R =100μA | |
| | | 75 | - | - | | I _R =5μA | |
| Forward Voltage | V _F | - | - | 0.715 | V | I _F =1mA | |
| | | - | - | 0.855 | | I _F =10mA | |
| | | - | - | 1 | | I _F =50mA | |
| | | - | - | 1.25 | | I _F =150mA | |
| Reverse Leakage Current | I _R | - | - | 30 | nA | V _R =20V | |
| | | - | - | 1 | | μA | V _R =75V |
| | | - | - | 5 | | μA | V _R =100V |
| Total Capacitance | C _{tot} | - | 2 | - | pF | V _R =0, f=1MHz | |
| Reverse Recovery Time | T _{RR} | - | 4 | - | nS | I _F =I _R =10mA, I _{rr} =0.1xI _R | |

TYPICAL CHARACTERISTICS

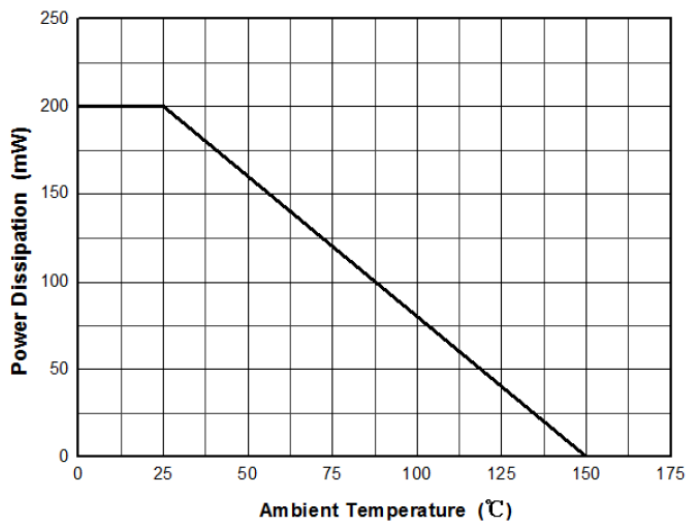
Typical Instantaneous Forward Characteristics



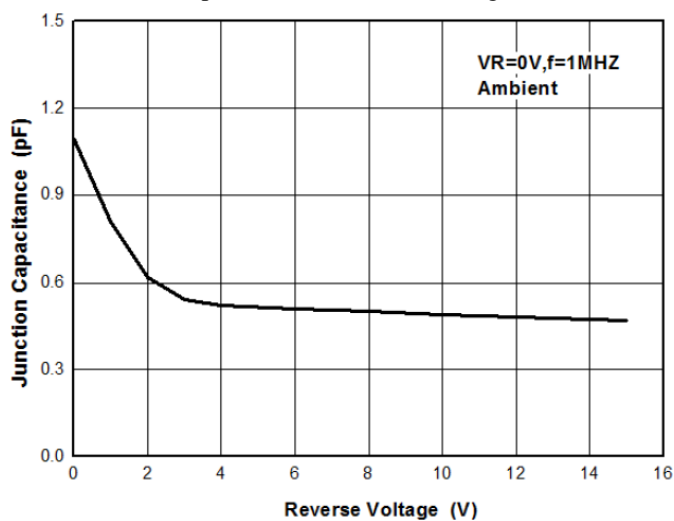
Typical Reverse Leakage Characteristics



Power Derating Curve

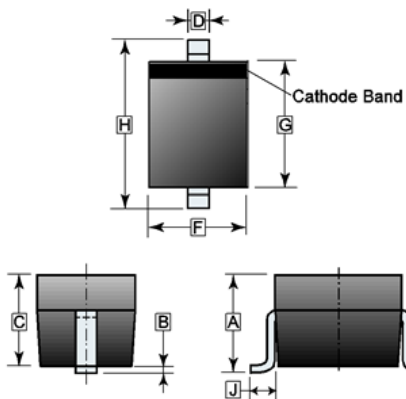


Capacitance vs Reverse Voltage(V_R)



PACKAGE OUTLINE DIMENSIONS

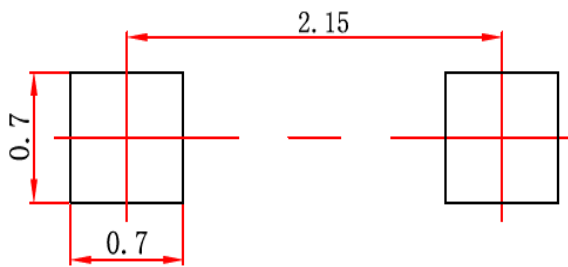
SOD-323



| REF. | Millimeter | |
|------|------------|------|
| | Min. | Max. |
| A | 1.05 REF. | |
| B | 0.07 REF. | |
| C | 0.80 | 0.80 |
| D | 0.25 | 0.25 |
| E | 0.05 | 0.05 |
| F | 1.10 | 1.50 |
| G | 1.50 | 1.95 |
| H | 2.30 | 2.80 |
| J | 0.475 REF. | |

MOUNTING PAD LAYOUT

SOD-323



*Dimensions in millimeters