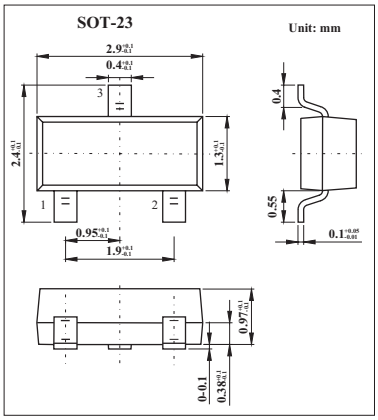
# Silicon PIN Diode Array

# BAR66




## Features

- Surge protection device
- Two PIN diodes, series configuration
- Designed for surge overvoltage clamping in antiparallel connection

## Absolute Maximum Ratings Ta = 25℃

| Parameter | Symbol | Value | Unit |
|---|---|---|---|
| Reverse voltage | $V_R$ | 150 | V |
| Forward current | $I_F$ | 200 | mA |
| Forward current (tp = 1 μ S) | $I_F$ | 20 | A |
| Power dissipation, Ts ≤ 25℃ 1) | $P_{tot}$ | 250 | mW |
| Operating temperature range | $T_{op}$ | -55 to +150 | ℃ |
| Storage temperature range | $T_{stg}$ | -55 to +150 | ℃ |
| Junction - ambient 1) | $R_{thJA}$ | ≤ 450 | K/W |

Note

1. Package mounted on alumina 15mm × 16.7mm × 0.7mm

## Electrical Characteristics Ta = 25℃

| Parameter | Symbol | Test Condition | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|
| Reverse leakage | $I_R$ | $I_R$ = 5 μ A | 150 | | | V |
| Forward voltage | $V_F$ | $I_F$ = 50 mA | | 0.95 | 1.2 | V |
| Diode capacitance | $C_T$ | $V_R$ = 35 V, f = 1 MHz | | 0.4 | 0.6 | pF |
| | | $V_R$ = 0 , f = 100 MHz | | 0.35 | | |
| Forward resistance | $r_f$ | $I_F$ = 10 mA, f = 100 MHz | | 1.5 | | Ω |
| Charge carrier life time | $\tau_S$ | $I_F$ = 10 mA, $I_R$ = 6 mA, $I_R$ = 3 mA | | 0.7 | | μ s |
| Series inductance | $L_S$ | | | 2 | | nH |

## Marking

| Marking | PMs |
|---|---|