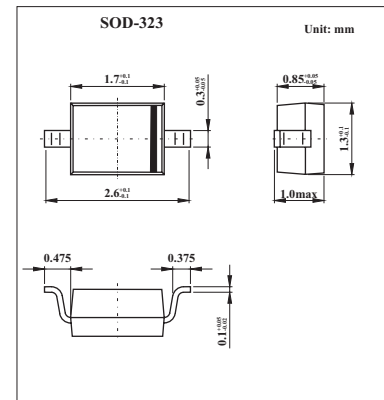


High-Speed Diode

KAS316(BAS316)

■ Features

- Very small plastic SMD package
- High switching speed: max. 4 ns
- Continuous reverse voltage: max. 75 V
- Repetitive peak reverse voltage: max. 85 V
- Repetitive peak forward current: max. 500 mA.



■ Absolute Maximum Ratings Ta = 25°C

| Parameter | Symbol | Rating | Unit |
|-------------------------------------|--------|-------------|------|
| repetitive peak reverse voltage | VRRM | 85 | V |
| continuous reverse voltage | VR | 75 | V |
| continuous forward current | IF | 250 | mA |
| repetitive peak forward current | IFRM | 500 | mA |
| non-repetitive peak forward current | IFSM | 4 | A |
| t = 1 ms | | 1 | A |
| t = 1 μs | | 0.5 | A |
| power dissipation | PD | 400 | mW |
| junction temperature | Tj | 150 | °C |
| storage temperature | Tstg | -65 to +150 | °C |

■ Electrical Characteristics Ta = 25°C

| Parameter | Symbol | Testconditions | Min | Typ | Max | Unit |
|-----------------------|--------|--|-----|-----|------|------|
| Forward voltage | VF | IF = 1 mA | | | 715 | mV |
| | | IF = 10 mA | | | 855 | mV |
| | | IF = 50 mA | | | 1 | v |
| | | IF = 150 mA | | | 1.25 | v |
| Leakage current | IR | VR = 25 V | | | 30 | nA |
| | | VR = 75 V | | | 1 | μA |
| | | VR = 25 V; Tj = 150 °C | | | 30 | μA |
| | | VR = 75 V; Tj = 150 °C | | | 50 | μA |
| Junction Capacitance | CJ | VR = 0, f = 1.0MHz | | | 1.5 | pF |
| reverse recovery time | trr | when switched from IF = 10 mA to IR = 10mA; RL = 100 Ω; measured at IR = 1 mA | | | 4 | ns |

■ Marking

| | |
|---------|----|
| Marking | A6 |
|---------|----|