

HIGH VOLTAGE SWITCHING DIODE

• Device Marking: JS



BAS21HT1



CASE 477, STYLE 1
SOD-323

ORDERING INFORMATION

| Device | Package | Shipping |
|----------|---------|------------------|
| BAS21HT1 | SOD-323 | 3000/Tape & Reel |

Preferred: devices are recommended choices for future use and best overall value.

MARKING DIAGRAM



JS= Device Code

MAXIMUM RATINGS

| Rating | Symbol | Value | Unit |
|----------------------------|-----------------|-------|------|
| Continuous Reverse Voltage | V_R | 250 | Vdc |
| Peak Forward Current | I_F | 200 | mAdc |
| Peak Forward Surge Current | $I_{FM(surge)}$ | 625 | mAdc |

THERMAL CHARACTERISTICS

| Characteristic | Symbol | Max | Unit |
|---|-----------------|-------------|----------------------|
| Total Device Dissipation FR-5 Board,* $T_A = 25^\circ\text{C}$ | P_D | 200 | mW |
| Derate above 25°C | | 1.57 | mW/ $^\circ\text{C}$ |
| Thermal Resistance Junction to Ambient | $R_{\theta JA}$ | 635 | $^\circ\text{C/W}$ |
| Junction and Storage Temperature Range | T_J, T_{stg} | -55 to +150 | $^\circ\text{C}$ |

*FR-5 Minimum Pad

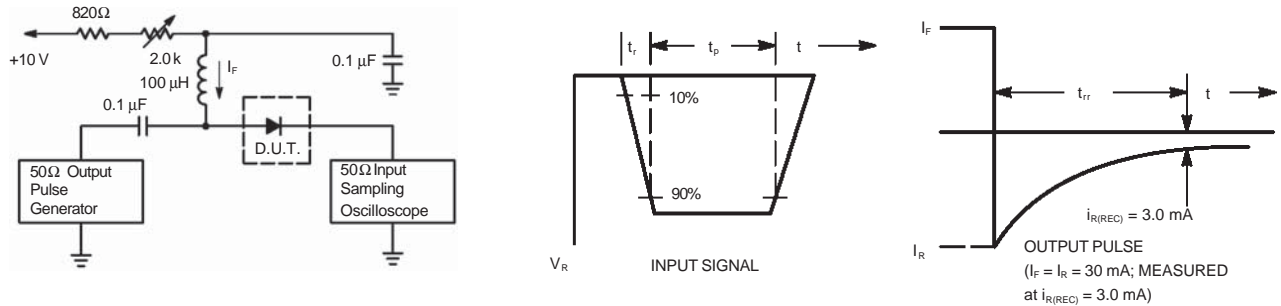
ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted)

| Characteristic | Symbol | Min | Max | Unit |
|----------------|--------|-----|-----|------|
|----------------|--------|-----|-----|------|

OFF CHARACTERISTICS

| | | | | |
|---|------------|-----|--------------|-----------------|
| Reverse Voltage Leakage Current ($V_R = 200$ Vdc) ($V_R = 200$ Vdc, $T_J = 150^\circ\text{C}$) | I_R | - | 1.0 100 | μAdc |
| Reverse Breakdown Voltage ($I_{BR} = 100$ μAdc) | $V_{(BR)}$ | 250 | - | Vdc |
| Forward Voltage ($I_F = 100$ mAdc) ($I_F = 200$ mAdc) | V_F | - | 1000 1250 | mV |
| Diode Capacitance ($V_R = 0$, $f = 1.0$ MHz) | C_D | - | 5.0 | pF |
| Reverse Recovery Time ($I_F = I_R = 30$ mAdc, $R_L = 100$ Ω) | t_{rr} | - | 50 | ns |

BAS21HT1



- Notes:**
1. A 2.0 kΩ variable resistor adjusted for a Forward Current (I_F) of 30 mA.
 2. Input pulse is adjusted so $I_{R(\text{peak})}$ is equal to 30 mA.
 3. $t_p \gg t_{rr}$

Figure 1. Recovery Time Equivalent Test Circuit

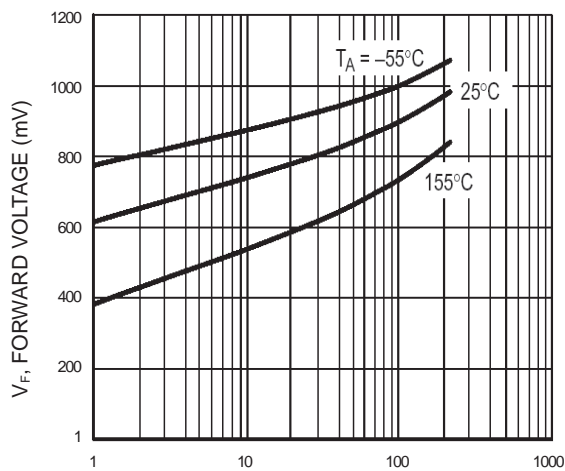


Figure 1. Forward Voltage

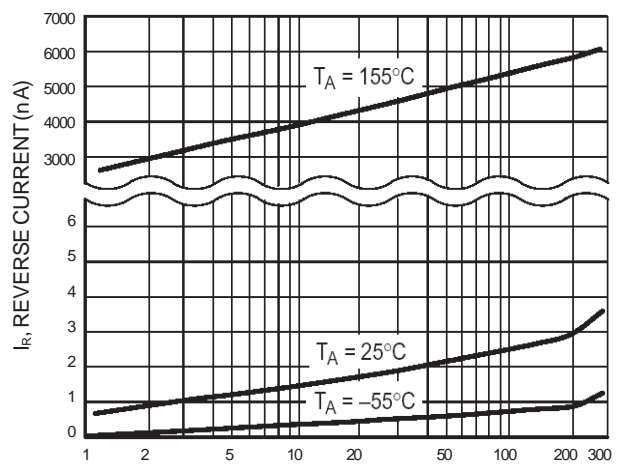


Figure 2. Reverse Leakage



LittleDiode supplies new, hard to find or obsolete electronic components and semiconductors all over the world.

With over two million different components listed you are sure to find the part you need.

Feel free to visit us today at our online store:

LittleDiode.com

Looking forward to providing you with the best possible service.