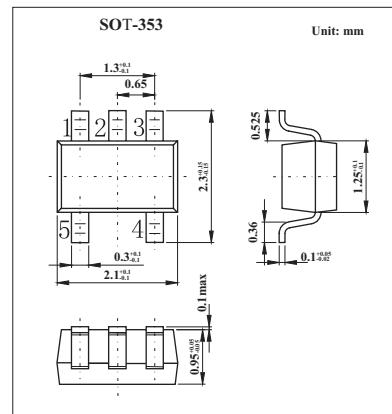
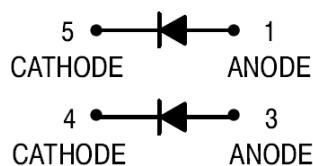


## High Voltage Switching Diode

### BAS21DW5T1

#### ■ Features

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- High Conductance
- For General Purpose Switching Applications

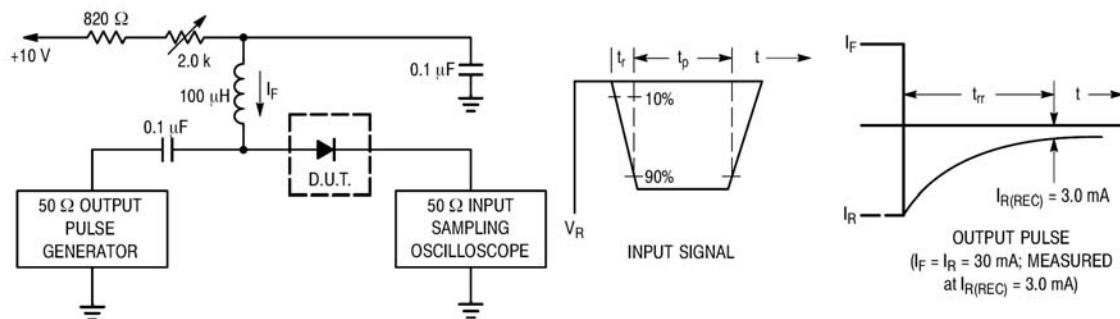


#### ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Reverse Voltage	V <sub>R</sub>	250	V
Peak Reverse Voltage	V <sub>RRM</sub>	250	V
Forward Current	I <sub>F</sub>	200	mA
Power Dissipation	P <sub>D</sub>	385	mW
Operating Junction Temperature Range	T <sub>J</sub>	-55 to +150	°C
Storage Temperature Range	T <sub>stg</sub>	-55 to +150	°C

#### ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Reverse Breakdown Voltage	V <sub>(BR)</sub>	I <sub>R</sub> =100 μA	250			V
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =100mA I <sub>F</sub> =200mA			1.0 1.25	V
Reverse Leakage	I <sub>R</sub>	V <sub>R</sub> =200V V <sub>R</sub> =200V, T <sub>J</sub> = 150°C			0.1 100	μ A
Junction Capacitance	C <sub>j</sub>	V <sub>R</sub> =0V, f=1.0MHz			5.0	pF
Reverse Recover Time	T <sub>rr</sub>	I <sub>F</sub> = I <sub>R</sub> = 30 mA, I <sub>R(REC)</sub> = 3.0 mA, R <sub>L</sub> = 100 Ω			50	nS

**BAS21DW5T1**

Notes: 1. A 2.0 k $\Omega$  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.  $t_p \gg t_{rf}$

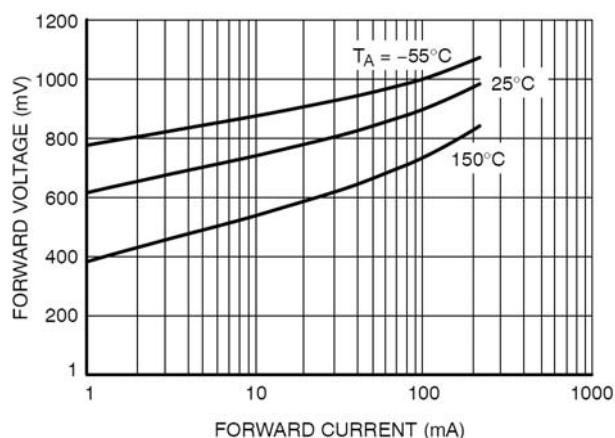


Figure 2. Forward Voltage

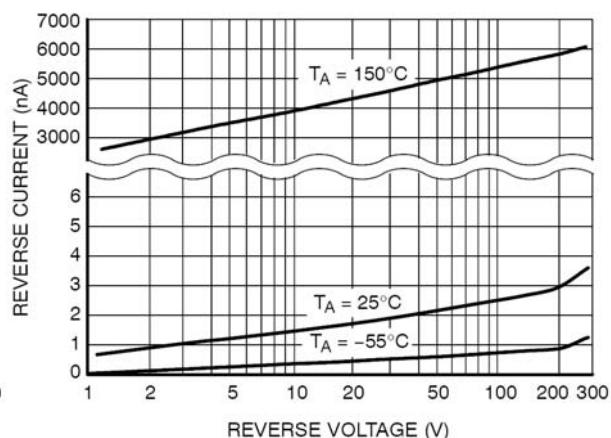


Figure 3. Reverse Leakage