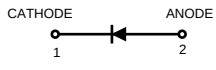
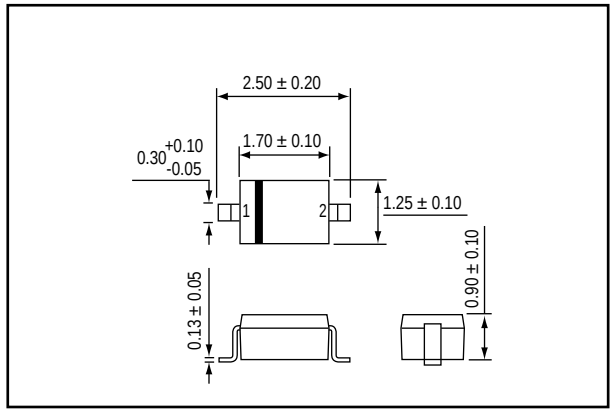
HIGH VOLTAGE SWITCHING DIODE
Lead free product

BAS21HT1G

SOD-323



OUTLINE DIMENSIONS



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

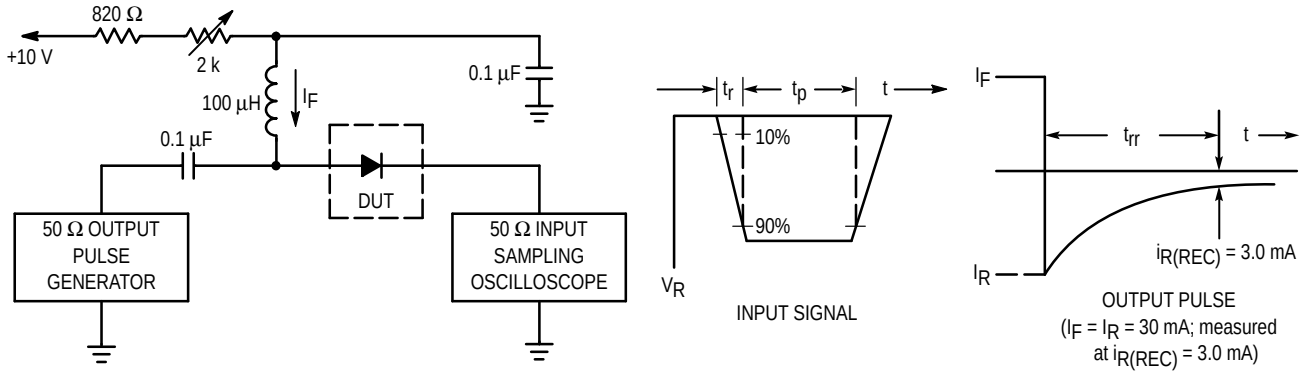
Characteristic	Symbol	Max.	Unit
Total Device Dissipation FR-5 Board,* T_A=25°C Derate above 25°C	P_D	200 1.57	mW mW / °C
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	635	°C / W
Junction and Storage Temperature Range	T_J,T_{STG}	-55 to +150	°C

*FR-5 Minimum Pad

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

Characteristic		Symbol	Min.	Max.	Unit
OFF CHARACTERISTICS					
Reverse Breakdown Voltage (I_{BR}=100uAdc)		$V_{(BR)}$	250	-	Vdc
Forward Voltage	(I_F=100 mAdc) (I_F=200 mAdc)	V_F	- -	1000 1250	mVdc
Reverse Voltage Leakage Current	(V_R= 200 Vdc) (V_R= 200 Vdc, T_J=150°C)	I_R	- -	1.0 100	uAdc
Diode Capacitance (V_R=0, f=1.0MHz)		C_D	-	5.0	pF
Reverse Recovery Time (I_F=I_R=30 mAdc, R_L=100Ω)		trr	-	50	nS

FIGURE 1. RECOVERY TIME EQUIVALENT TEST CIRCUIT



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(peak) is equal to 30 mA.
3. t_p >> trr

FIGURE 2. FORWARD VOLTAGE

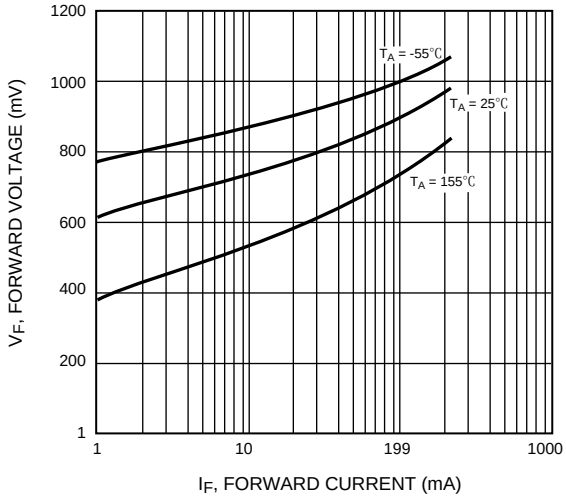


FIGURE 3. REVERSE LEAKAGE