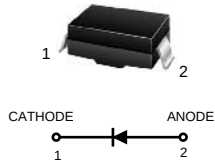




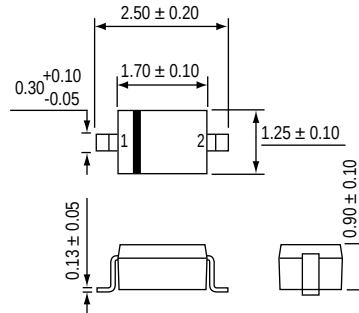
HIGH VOLTAGE SWITCHING DIODE Lead free product

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	$I_{FM}(\text{surge})$	625	mAdc

THERMAL CHARACTERISTICS

Characteristic	Symbol	Max.	Unit
Total Device Dissipation FR-5 Board, * $T_A=25^\circ\text{C}$ Derate above 25°C	P_D	200 1.57	mW mW / $^\circ\text{C}$
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	635	$^\circ\text{C} / \text{W}$
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
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OFF CHARACTERISTICS

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



FIGURE 1. RECOVERY TIME EQUIVALENT TEST CIRCUIT

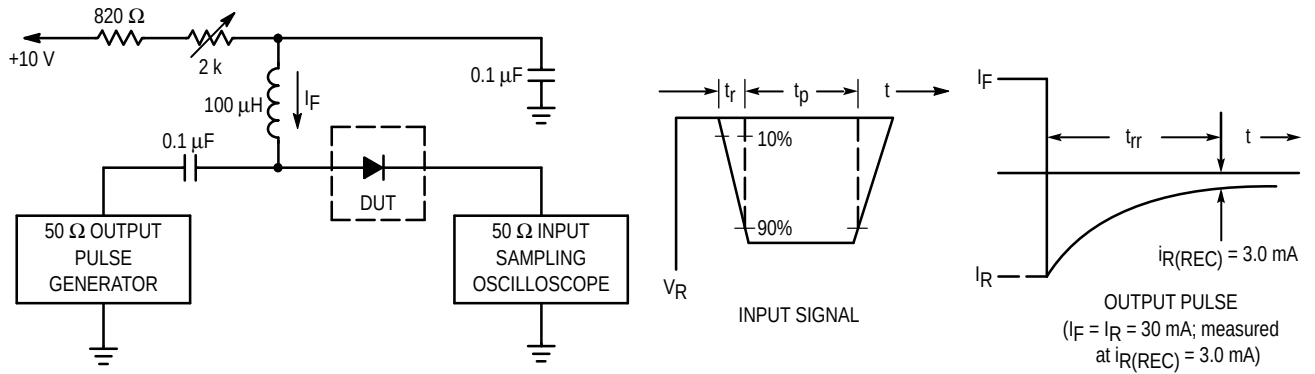


FIGURE 2. FORWARD VOLTAGE

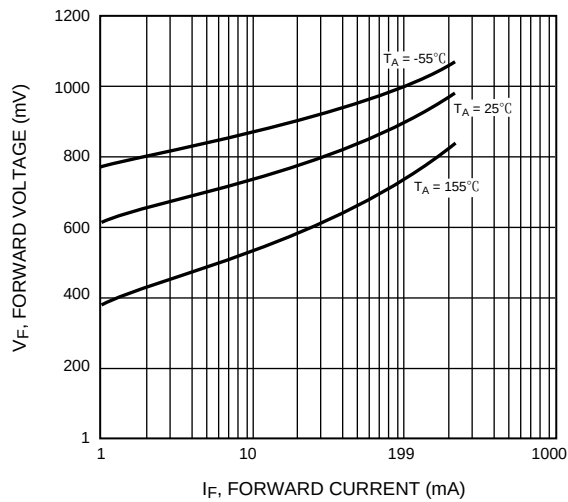


FIGURE 3. REVERSE LEAKAGE

