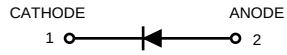
Zowie Technology Corporation

Switching Diode
Lead free product
Halogen-free type

BAS16HT1GH



SOD-323



MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Continuous Reverse Voltage	V_R	75	Vdc
Peak Forward Current	I_F	200	mAdc
Peak Forward Surge Current	$I_{FM(surge)}$	500	mAdc

THERMAL CHARACTERISTICS

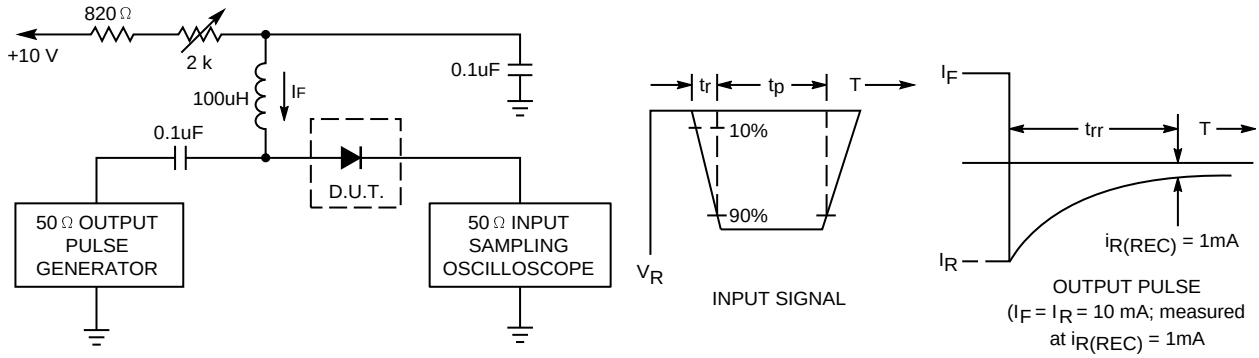
Characteristic	Symbol	Max.	Unit
Total Device Dissipation FR-5 Board, T_A=25°C Derate above 25°C	P_D	200 1.57	mW mW / °C
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	635	°C / W
Junction and Storage Temperature	T_J,T_{STG}	150	°C

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

Characteristic		Symbol	Min.	Max.	Unit
OFF CHARACTERISTICS					
Reverse Breakdown Voltage (I_{BR}=100uAdc)		$V_{(BR)}$	75	-	Vdc
Forward Voltage	(I_F=1.0 mAdc) (I_F=10 mAdc) (I_F=50 mAdc) (I_F=150 mAdc)	V_F	- - - -	715 855 1000 1250	mVdc
Reverse Voltage Leakage Current	(V_R=75 Vdc) (V_R=75 Vdc, T_J=150°C) (V_R=25 Vdc, T_J=150°C)	I_R	- - -	1.0 50 30	uAdc
Junction Capacitance (V_R=0, f=1.0MHz)		C_J	-	2.0	pF
Reverse Recovery Time (I_F=10 mAdc, to V_R = 5.0 Vdc, R_L=500Ω)		trr	-	6.0	nS
Forward Recovery Voltage (I_F=10 mAdc, tr=20nS)		V_{FR}	-	1.75	Vdc
Stored Charge (I_F=10 mAdc, to V_R = 5.0 Vdc, R_L=500Ω)		Q_S	-	45	pC

NOTE : FR-5=1.0 x 0.75 x 0.062in.

FIGURE 1. RECOVERY TIME EQUIVALENT TEST CIRCUIT



Notes: 1. A 2.0k Ω variable resistor adjusted for a Forward Current (I_F) of 10mA.
2. Input pulse is adjusted so $I_{R(peak)}$ is equal to 10mA.
3. t_p » t_{rr}

FIGURE 2. FORWARD VOLTAGE

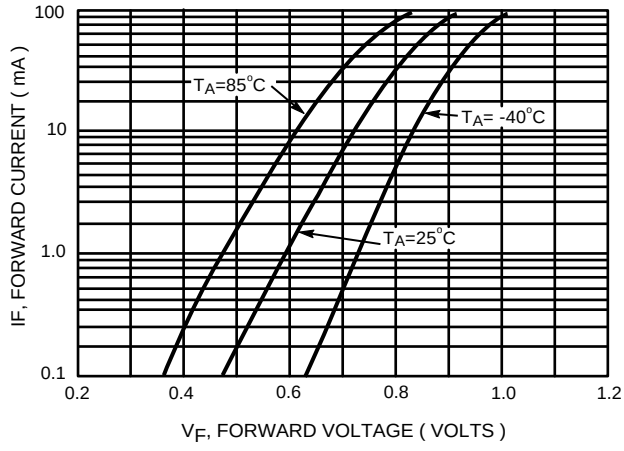


FIGURE 3. LEAKAGE CURRENT

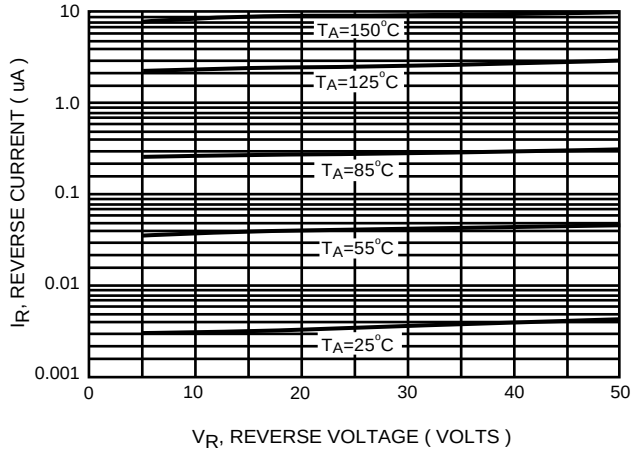


FIGURE 4. CAPACITANCE

