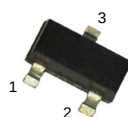


Monolithic Dual Switching Diode Common Anode

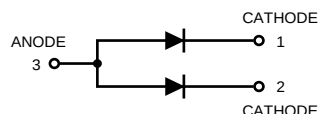
Lead free product

Halogen-free type

BAW56GH



SOT-23



MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Reverse Voltage	V_R	70	Vdc
Forward Current	I_F	200	mAdc
Peak Forward Surge Current	$I_{FM}(\text{surge})$	500	mAdc

THERMAL CHARACTERISTICS

Characteristic	Symbol	Max.	Unit
Total Device Dissipation FR-5 Board ⁽¹⁾ $T_A=25^\circ\text{C}$ Derate above 25°C	P_D	225	mW
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	556	$^\circ\text{C} / \text{W}$
Total Device Dissipation Alumina Substrate, ⁽²⁾ $T_A=25^\circ\text{C}$ Derate above 25°C	P_D	300 2.4	mW mW / $^\circ\text{C}$
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	417	$^\circ\text{C} / \text{W}$
Junction and Storage Temperature	T_J, T_{STG}	-55 to +150	$^\circ\text{C}$

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

Characteristic	Symbol	Min.	Max.	Unit
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OFF CHARACTERISTICS

Reverse Breakdown Voltage ($I_{BR} = 100\mu\text{Adc}$)	$V_{(BR)}$	70	-	Vdc
Reverse Voltage Leakage Current ($V_R=25\text{Vdc}$, $T_J=150^\circ\text{C}$) ($V_R=70\text{Vdc}$) ($V_R=70\text{Vdc}$, $T_J=150^\circ\text{C}$)	I_R	- - -	30 2.5 50	μAdc
Diode Capacitance ($V_R=0$, $f = 1.0 \text{ MHz}$)	C_D	-	2.0	pF
Forward Voltage ($I_F = 1.0 \text{ mAdc}$) ($I_F = 10 \text{ mAdc}$) ($I_F = 50 \text{ mAdc}$) ($I_F = 150 \text{ mAdc}$)	V_F	- - - -	715 855 1000 1250	mVdc
Reverse Recovery Time ($I_F = I_R = 10 \text{ mAdc}$, $I_{R(REC)} = 1.0 \text{ mAdc}$) (Figure 1) $R_L = 100 \Omega$	t_{rr}	-	6.0	nS

(1) FR-5=1.0 × 0.75 × 0.062 in.

(2) Alumina = 0.4 × 0.3 × 0.024in. 99.5% alumina.

FIGURE 1. RECOVERY TIME EQUIVALENT TEST CIRCUIT

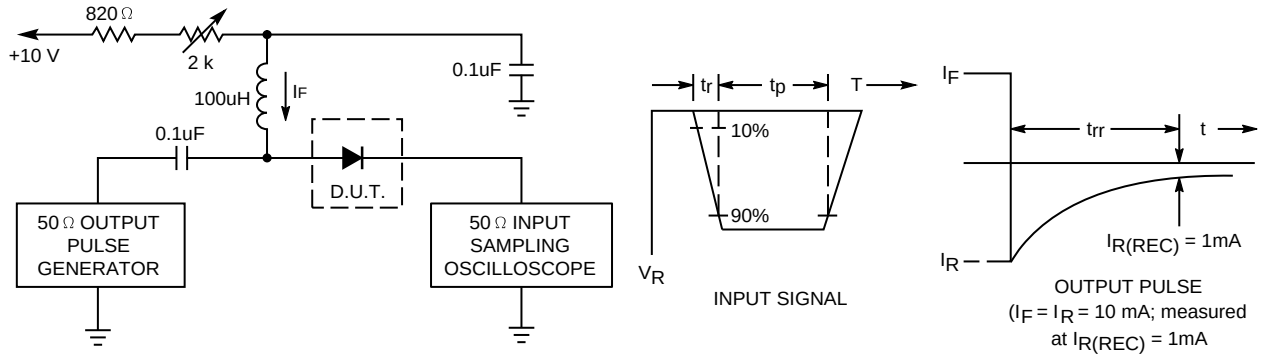


FIGURE 2. FORWARD VOLTAGE

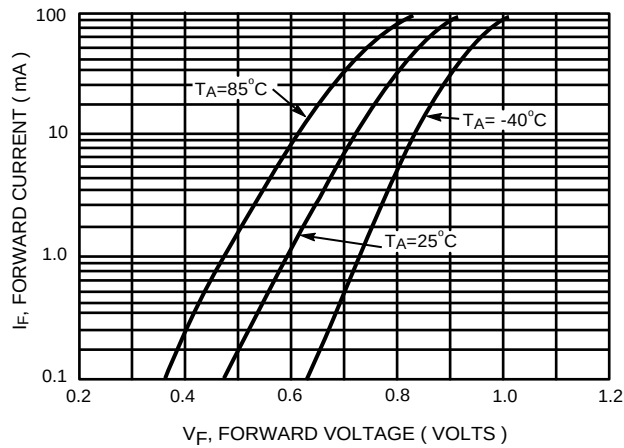


FIGURE 3. LEAKAGE CURRENT

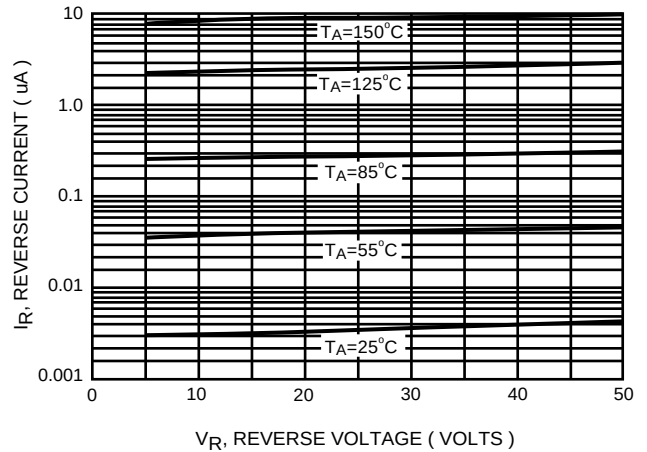
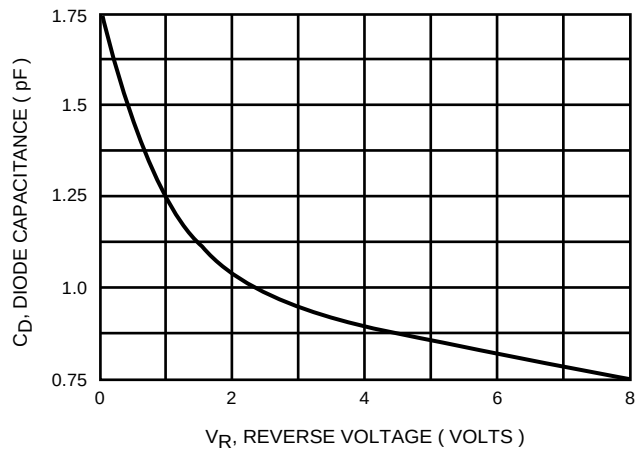


FIGURE 4. CAPACITANCE



CASE DRAWINGS

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Unit : mm

