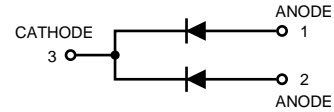


**Monolithic Dual Switching Diode**  
**Common Cathode**  
**Lead free product**  
**Halogen-free type**

**BAV70GH**



**MAXIMUM RATINGS**

Rating	Symbol	Value	Unit
Continuous Reverse Voltage	VR	70	Vdc
Peak Forward Current	IF	200	mAdc
Peak Forward Surge Current	IFM( surge )	500	mAdc

**THERMAL CHARACTERISTICS**

Characteristic	Symbol	Max.	Unit
Total Device Dissipation FR-5 Board <sup>(1)</sup> TA=25°C Derate above 25°C	PD	225 1.8	mW mW / °C
Thermal Resistance, Junction to Ambient	R $\theta$ JA	556	°C / W
Total Device Dissipation Alumina Substrate, <sup>(2)</sup> TA=25°C Derate above 25°C	PD	300 2.4	mW mW / °C
Thermal Resistance, Junction to Ambient	R $\theta$ JA	417	°C / W
Junction and Storage Temperature	TJ,TSTG	-55 to +150	°C

**ELECTRICAL CHARACTERISTICS (TA=25°C unless otherwise noted) (EACH DIODE)**

Characteristic	Symbol	Min.	Max.	Unit
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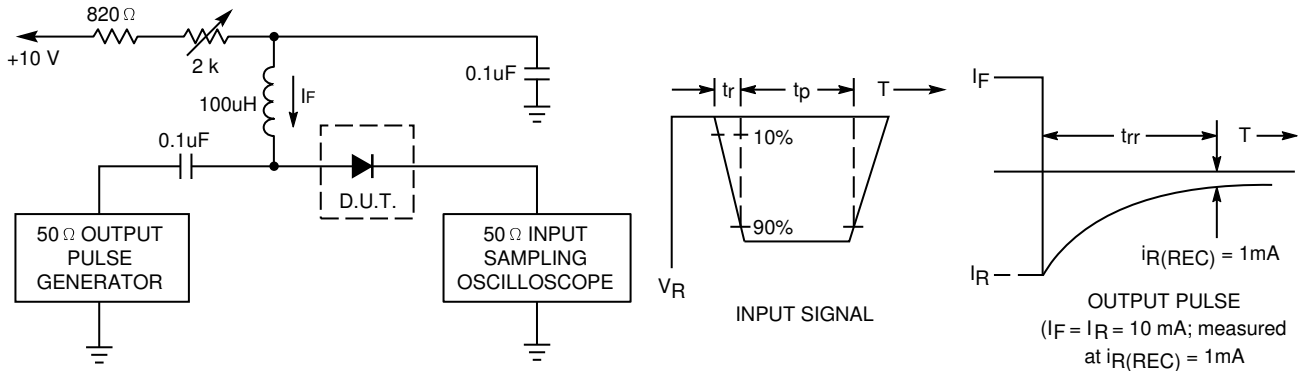
**OFF CHARACTERISTICS**

Reverse Breakdown Voltage ( IBR=100uAdc )	V(BR)	70	-	Vdc
Forward Voltage ( IF=1.0 mAdc ) ( IF=10 mAdc ) ( IF=50 mAdc ) ( IF=150 mAdc )	VF	- - - -	715 855 1000 1250	mVdc
Reverse Voltage Leakage Current ( VR=70 Vdc ) ( VR=25 Vdc, TJ=150°C ) ( VR=70 Vdc, TJ=150°C )	IR	- - -	2.5 60 100	uAdc
Diode Capacitance ( VR=0, f=1.0MHZ )	CJ	-	1.5	pF
Reverse Recovery Time ( IF=IR=10 mAdc, VR=5.0 Vdc, IR(REC)=1.0mAdc, RL=100Ω )	trr	-	6.0	nS

(1) FR-5=1.0 x 0.75 x 0.062in.

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

FIGURE 1. RECOVERY TIME EQUIVALENT TEST CIRCUIT



- Notes: 1. A 2.0kΩ 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.  $t_p \gg t_{rr}$

FIGURE 2. FORWARD VOLTAGE

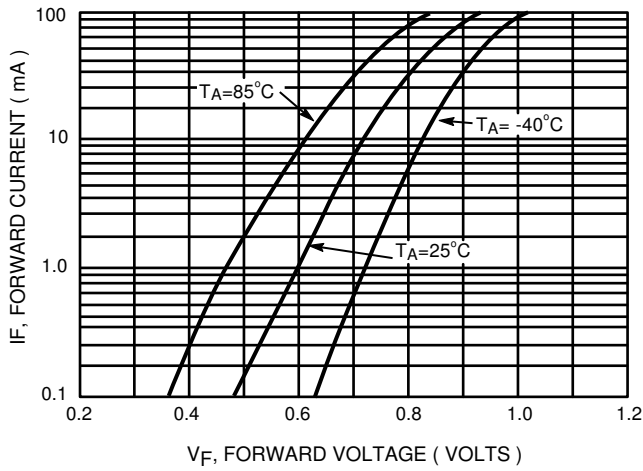


FIGURE 3. LEAKAGE CURRENT

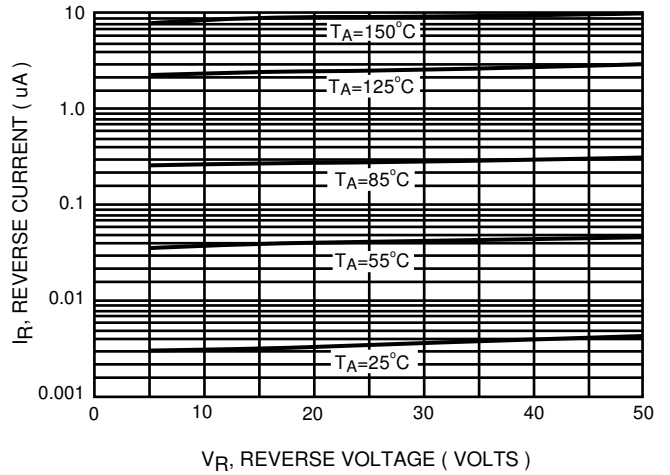


FIGURE 4. CAPACITANCE

