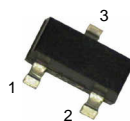
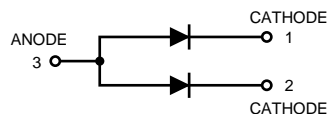


## Monolithic Dual Switching Diode

**MMBD2836**



SOT-23



### MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Continuous Reverse Voltage	VR	75	Vdc
Peak Forward Current	IF	100	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	RθJA	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	RθJA	417	°C / W
Junction and Storage Temperature	TJ,TSTG	-55 to +150	°C

### DEVICE MARKING

**MMBD2836=A2X**

### 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=100 uAdc )	V(BR)	75	-	Vdc
Forward Voltage ( IF=10 mAdc ) ( IF=50 mAdc ) ( IF=100 mAdc )	VF	- - -	1000 1000 1200	mVdc
Reverse Voltage Leakage Current (VR=50 Vdc )	IR	- -	0.1	uAdc
Diode Capacitance ( VR=0, f=1.0MHz )	CJ	-	4.0	pF
Reverse Recovery Time ( IF=IR=10 mAdc, IR(REC)=1.0mAdc, measured at IR=1.0mA RL=100 Ω )	trr	-	4.0	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

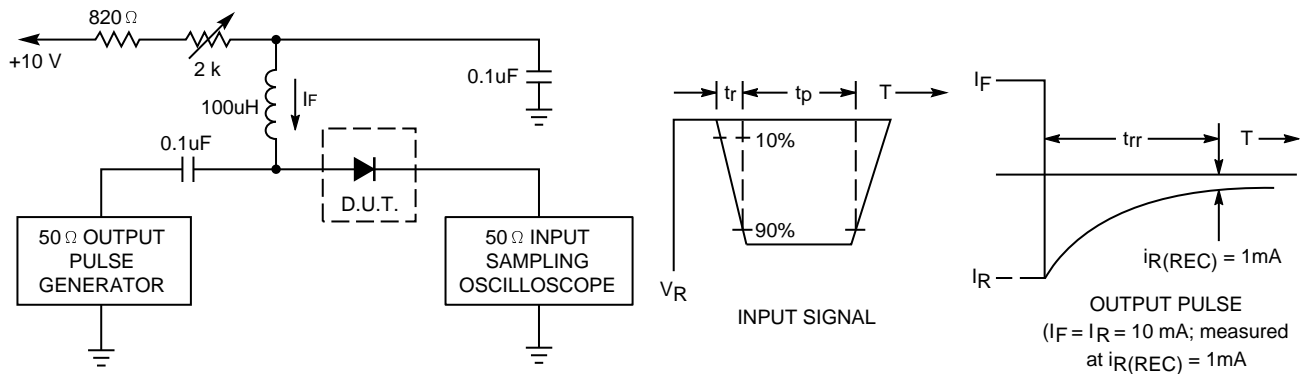


FIGURE 2. FORWARD VOLTAGE

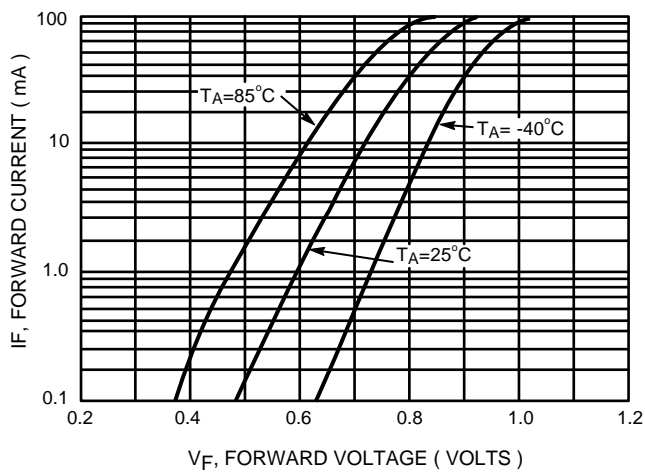


FIGURE 3. LEAKAGE CURRENT

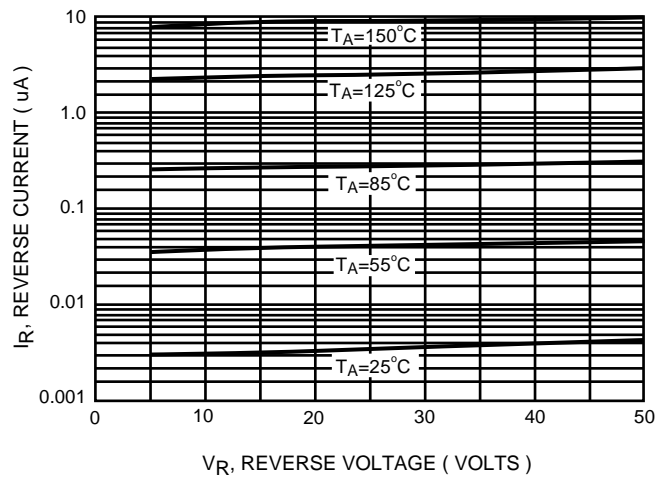


FIGURE 4. CAPACITANCE

