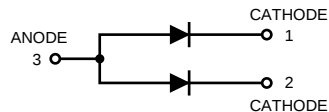


Monolithic Dual Switching Diode

MMBD2836GH



SOT-23



ORDERING INFORMATION

Device	Marking	Shipping
LMBD2835LT1G	A3X	3000/Tape&Reel
LMBD2835LT3G	A3X	10000/Tape&Reel
LMBD2836LT1G	A2X	3000/Tape&Reel
LMBD2836LT3G	A2X	10000/Tape&Reel

MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Peak Reverse Voltage	V_{RM}	75	Vdc
D.C Reverse Voltage	V_R	35	Vdc
	LMBD2836LT1G	75	
Peak Forward Current	I_{FM}	450	mAdc
		300	
Average Rectified Current	I_O	150	mAdc
		100	

THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
Total Device Dissipation FR– 5 Board ⁽¹⁾ $T_A = 25^\circ\text{C}$	P_D	225	mW
Derate above 25°C		1.8	mW/ $^\circ\text{C}$
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	556	$^\circ\text{C/W}$
Total Device Dissipation	P_D	300	mW
Alumina Substrate, ⁽²⁾ $T_A = 25^\circ\text{C}$			
Derate above 25°C		2.4	mW/ $^\circ\text{C}$
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	417	$^\circ\text{C/W}$
Junction and Storage Temperature	T_J, T_{stg}	–55 to +150	$^\circ\text{C}$

DEVICE MARKING

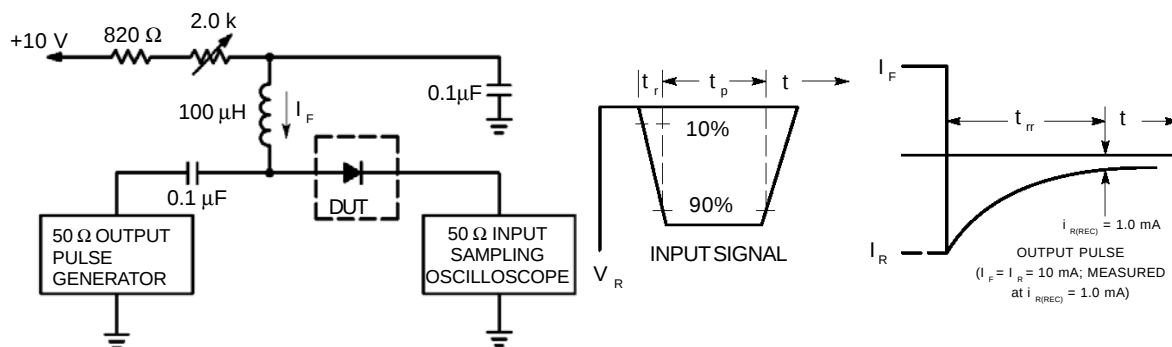
LMBD2835LT1G = A3X; LMBD2836LT1G = A2X

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

Characteristic	Symbol	Min	Max	Unit
OFF CHARACTERISTICS				
Reverse Breakdown Voltage($I_R = 100 \mu\text{Adc}$)	$V_{(BR)}$	35	—	Vdc
		75	—	
Reverse Voltage Leakage Current	I_R	—	100	nAdc
($V_R = 30 \text{ Vdc}$)	LMBD2835LT1G	—	100	
($V_R = 50 \text{ Vdc}$)	LMBD2836LT1G	—	100	
Diode Capacitance	C_T	—	4.0	pF
($V_R = 0, f = 1.0 \text{ MHz}$)				
Forward Voltage($I_F = 10 \text{ mAdc}$)	V_F	—	1.0	Vdc
($I_F = 50 \text{ mAdc}$)		—	1.0	
($I_F = 100 \text{ mAdc}$)		—	1.2	
Reverse Recovery Time($I_F = I_R = 10 \text{ mAdc}, I_{R(REC)} = 1.0 \text{ mAdc}$) (Figure 1)	t_{rr}	—	4.0	ns

1. FR–5 = $1.0 \times 0.75 \times 0.062 \text{ in.}$

2. Alumina = $0.4 \times 0.3 \times 0.024 \text{ in.}$ 99.5% alumina.



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

Figure 1. Recovery Time Equivalent Test Circuit

CURVES APPLICABLE TO EACH CATHODE

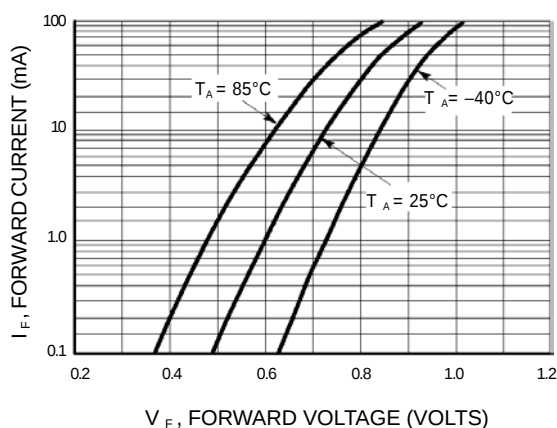


Figure 2. Forward Voltage

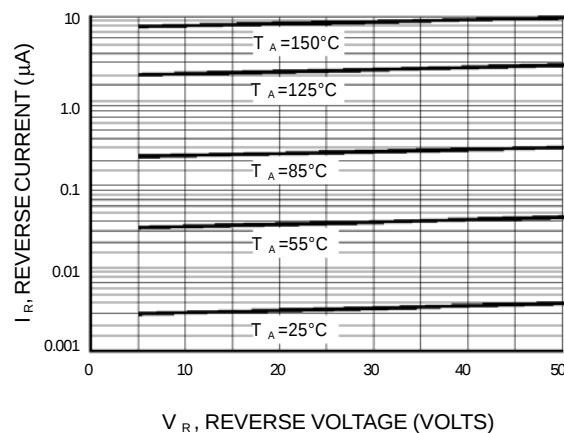


Figure 3. Leakage Current

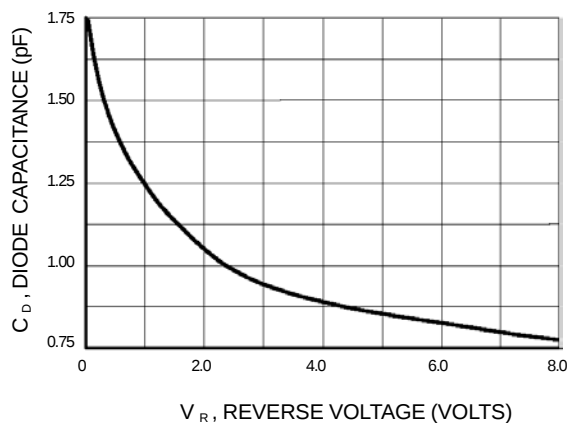


Figure 4. Capacitance