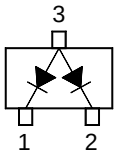
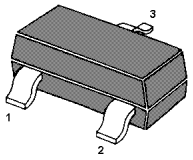
MMBD2835, MMBD2836

Silicon Epitaxial Planar Switching Diode

Features

- Small package
- Low forward voltage
- Fast reverse recovery time
- Small total capacitance





Marking Code: **A1**
SOT-23 Plastic Package

Applications

- Ultra high speed switching application

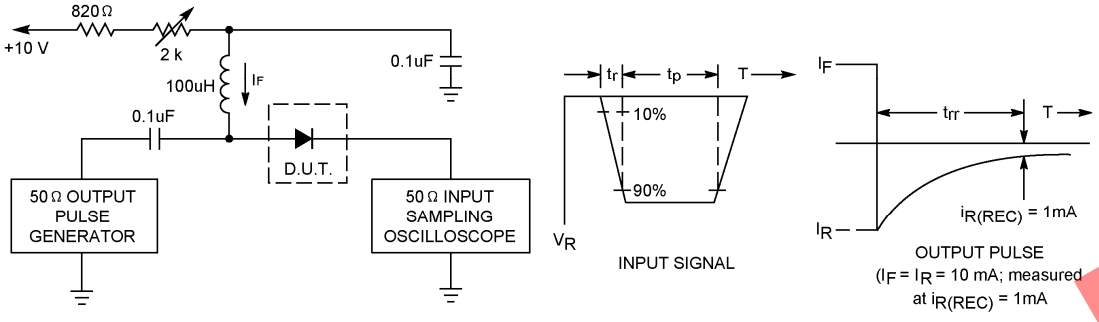
Absolute Maximum Ratings (T_a = 25 °C)

Parameter		Symbol	Value	Unit
Reverse Voltage	MMBD2835 MMBD2836	V_R	35 75	V
Forward Current		I_F	100	mA
Power Dissipation		P_{tot}	350	mW
Junction Temperature		T_j	150	°C
Storage Temperature Range		T_{stg}	- 55 to + 150	°C

Characteristics at T_a = 25 °C

Parameter		Symbol	Min.	Max.	Unit
Forward Voltage at I_F = 10 mA at I_F = 50 mA at I_F = 100 mA		 V_F V_F V_F	 - - -	 1 1 1.2	 V V V
Reverse Current at V_R = 30 V at V_R = 50 V	 MMBD2835 MMBD2836	 I_R	 - -	 100 100	 nA
Reverse Breakdown Voltage at I_R = 100 µA	 MMBD2835 MMBD2836	 $V_{(BR)R}$	 35 75	 - -	 V
Diode Capacitance at V_R = 0 , f = 1 MHz		C_T	-	4	pF
Reverse Recovery Time at I_F = I_R = 10 mA, $I_{R(REC)}$ = 1 mA		t_{rr}	-	4	ns

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

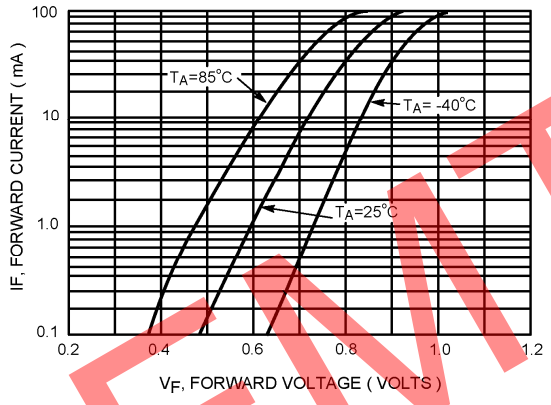


FIGURE 3. LEAKAGE CURRENT

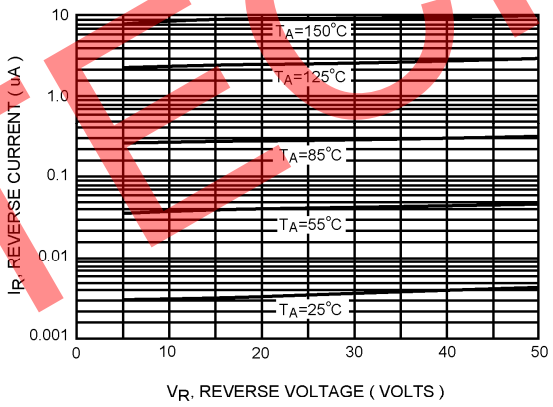


FIGURE 4. CAPACITANCE