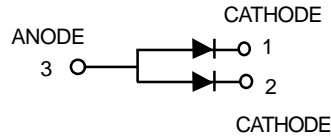
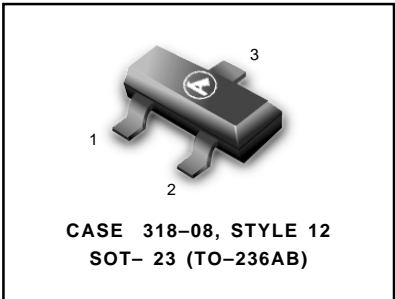


Monolithic Dual Switching Diodes



MMBD2835LT1
MMBD2836LT1



MAXIMUM RATINGS

| Rating | Symbol | Value | Unit | |
|-----------------|-------------|-------|------|-----|
| Reverse Voltage | MMBD2835LT1 | V_R | 35 | Vdc |
| | MMBD2836LT1 | | 75 | |
| Forward Current | I_F | 100 | mAdc | |

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/°C |
| Thermal Resistance, Junction to Ambient | $R_{\theta JA}$ | 556 | °C/W |
| Total Device Dissipation Alumina Substrate, ⁽²⁾ $T_A = 25^\circ\text{C}$ | P_D | 300 | mW |
| Derate above 25°C | | 2.4 | mW/°C |
| Thermal Resistance, Junction to Ambient | $R_{\theta JA}$ | 417 | °C/W |
| Junction and Storage Temperature | T_J, T_{stg} | -55 to +150 | °C |

DEVICE MARKING

MMBD2835LT1 = A3X; MMBD2836LT1 = A2X

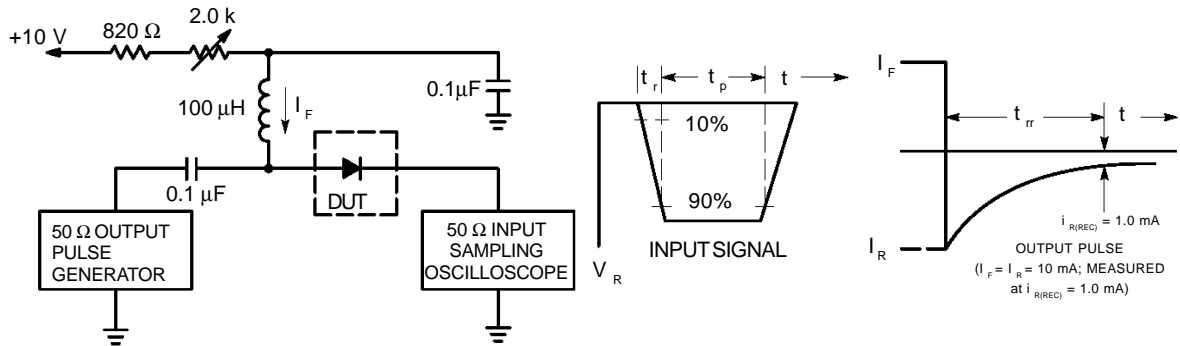
ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted) (EACH DIODE)

| Characteristic | Symbol | Min | Max | Unit | |
|---|-------------|------------|-----|------|------|
| OFF CHARACTERISTICS | | | | | |
| Reverse Breakdown Voltage ($I_R = 100 \mu\text{Adc}$) | MMBD2835LT1 | $V_{(BR)}$ | 35 | — | Vdc |
| | MMBD2836LT1 | | 75 | — | |
| Reverse Voltage Leakage Current ($V_R = 30 \text{ Vdc}$) | MMBD2835LT1 | I_R | — | 100 | nAdc |
| ($V_R = 50 \text{ Vdc}$) | MMBD2836LT1 | | — | 100 | |
| Diode Capacitance ($V_R = 0, f = 1.0 \text{ MHz}$) | C_T | — | 4.0 | pF | |
| 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 x 0.75 x 0.062 in.

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

MMBD2835LT1 MMBD2836LT1



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

Figure 1. Recovery Time Equivalent Test Circuit

CURVES APPLICABLE TO EACH CATHODE

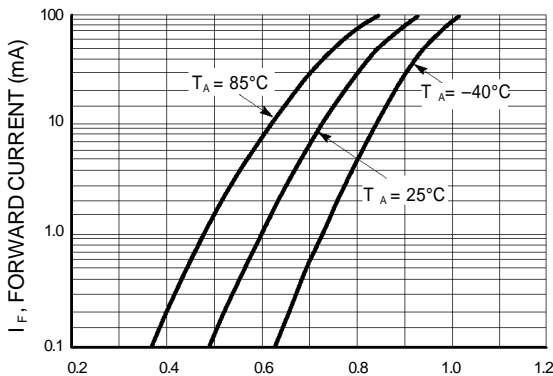


Figure 2. Forward Voltage

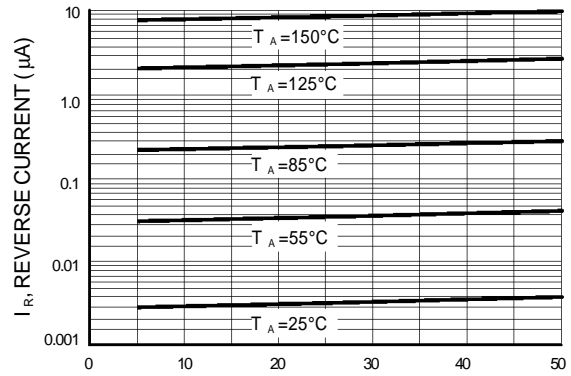


Figure 3. Leakage Current

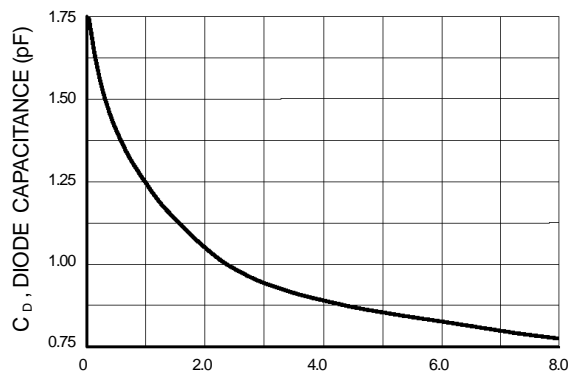


Figure 4. Capacitance