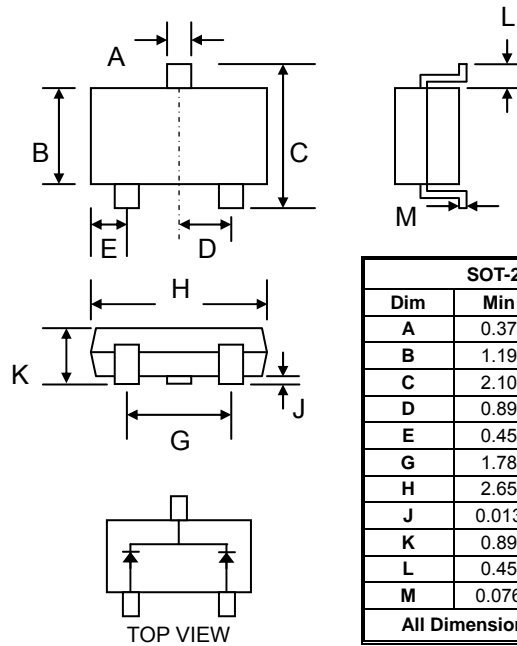


Features

- Dual Diode Common Cathode
- Fast Switching
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- Plastic Material – UL Recognition Flammability Classification 94V-0

Mechanical Data

- Case: SOT-23, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: See Diagram
- Weight: 0.008 grams (approx.)
- Mounting Position: Any
- Marking: Device Code, See Page 3
- **Lead Free: For RoHS / Lead Free Version, Add “-LF” Suffix to Part Number, See Page 4**



Maximum Ratings @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

Characteristic	Symbol	MMBD2837	MMBD2838	Unit
Non-Repetitive Peak Reverse Voltage	V_{RSM}	35	75	V
Peak Repetitive Reverse Voltage	V_{RRM}	30	50	V
Working Peak Reverse Voltage	V_{RWM}			
DC Blocking Voltage	V_R			
Forward Continuous Current	I_F	100		mA
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150		$^{\circ}\text{C}$

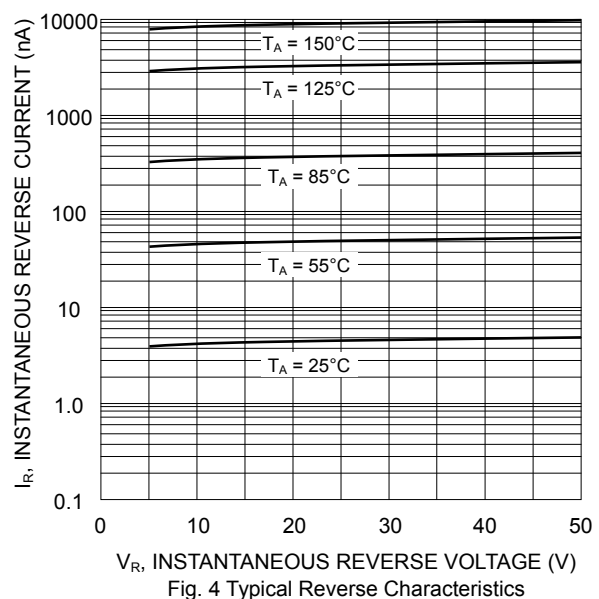
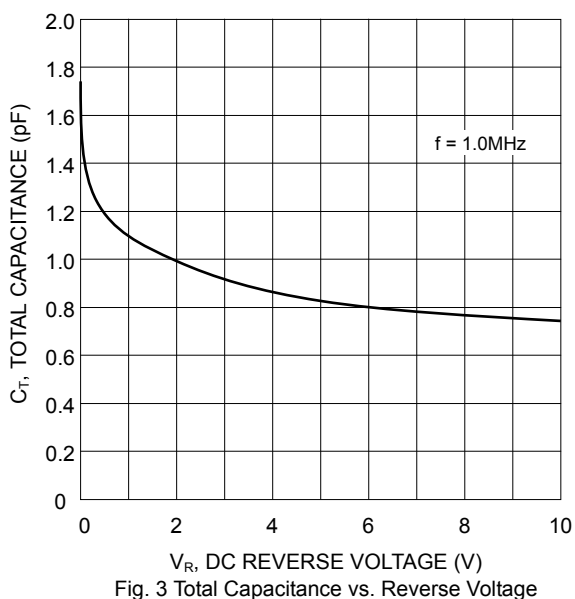
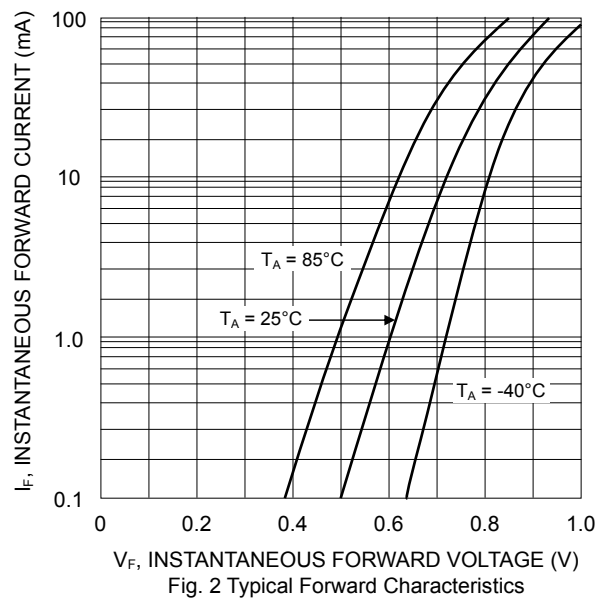
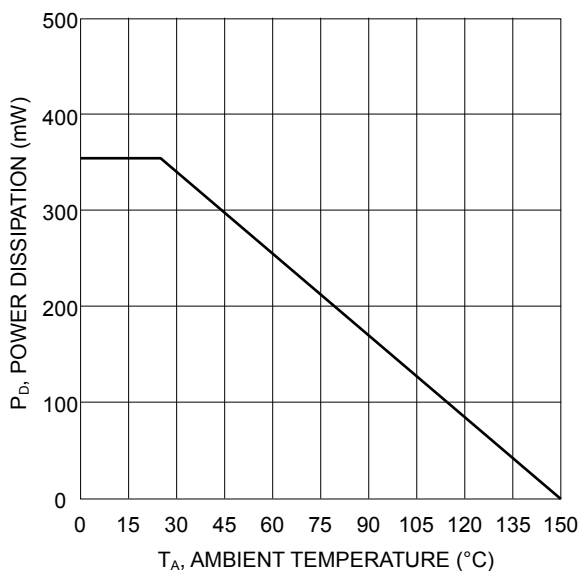
Thermal Characteristics

Characteristic	Symbol	MMBD2837	MMBD2838	Unit
Power Dissipation (Note 1)	P_D	350		mW
Thermal Resistance, Junction to Ambient (Note 1)	R_{JA}	357		$^{\circ}\text{C}/\text{W}$

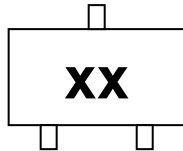
Note: 1. Mounted on FR-4 PC board with minimum recommended pad layout.

Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	MMBD2837	MMBD2838	Unit
Min. Reverse Breakdown Voltage @ $I_R = 100\mu\text{A}$	$V_{(BR)}$	35	75	V
Max. Forward Voltage Drop @ $I_F = 10\text{mA}$ @ $I_F = 50\text{mA}$ @ $I_F = 100\text{mA}$	V_{FM}	1.0 1.1 1.2		V
Peak Reverse Leakage Current @ $V_R = 30\text{V}$ @ $V_R = 50\text{V}$	I_{RM}	100 —	— 100	nA
Diode Capacitance ($V_R = 0\text{V}$, $f = 1.0\text{MHz}$)	C_D	4.0		pF
Reverse Recovery Time ($I_F = I_R = 10\text{mA}$, $I_{RR} = 0.1 \times I_R$, $R_L = 100\Omega$)	t_{rr}	4.0		nS



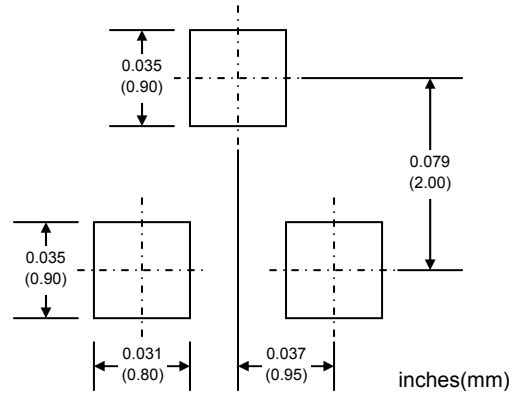
MARKING INFORMATION



xx = Device Code, See Table Below

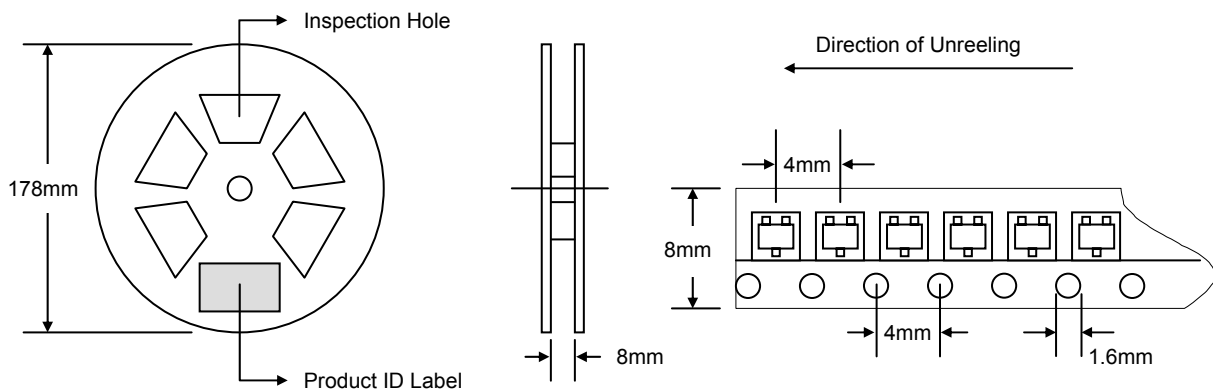
MMBD2837	MMBD2838
A5	A61

RECOMMENDED FOOTPRINT



PACKAGING INFORMATION

TAPE & REEL




Reel Diameter (mm)	Quantity (PCS)	Inner Box Size L x W x H (mm)	Quantity (PCS)	Carton Size L x W x H (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
178	3,000	187 x 187 x 65	15,000	390 x 240 x 420	150,000	10.0

Note: 1. Anti-static plastic reel, white, water clear or blue color. Inspection hole might be varied in different alignment.
2. Components are packed in accordance with EIA standard 481-1 and 481-2.

ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
MMBD2837-T1	SOT-23	3000/Tape & Reel
MMBD2838-T1	SOT-23	3000/Tape & Reel

1. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
2. **To order RoHS / Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, MMBD2837-T1-LF.**

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WARNING: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

Won-Top Electronics Co., Ltd.
No. 44 Yu Kang North 3rd Road,
Chine Chen Dist., Kaohsiung 806, Taiwan
Phone: 886-7-822-5408 or 886-7-822-5410
Fax: 886-7-822-5417
Email: sales@wontop.com
Internet: <http://www.wontop.com>

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