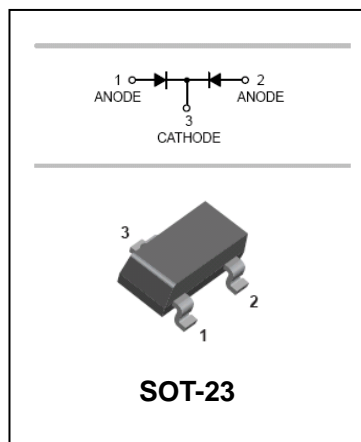


Surface mount switching diode

MMBD2837/MMBD2838
FEATURES

- High speed switching: $t_{rr}=3.0\text{ns}(\text{max})$
- Low capacitance: $C_T=1.1\text{pF}(\text{typ.})$


APPLICATIONS

- Small signal switching

ORDERING INFORMATION

Type No.	Marking	Package Code
MMBD2837	A5	SOT-23
MMBD2838	A61	SOT-23

MAXIMUM RATING @ $T_a=25^\circ\text{C}$ unless otherwise specified

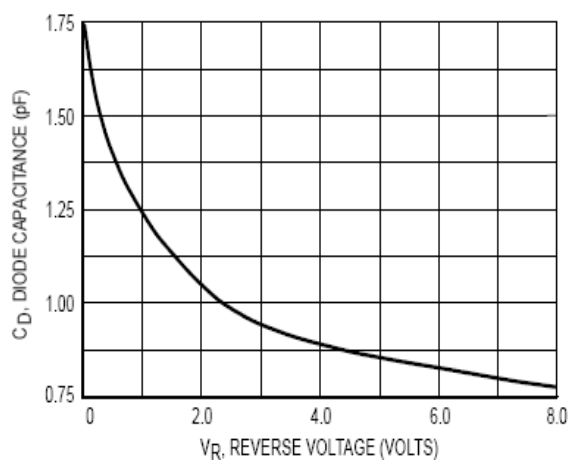
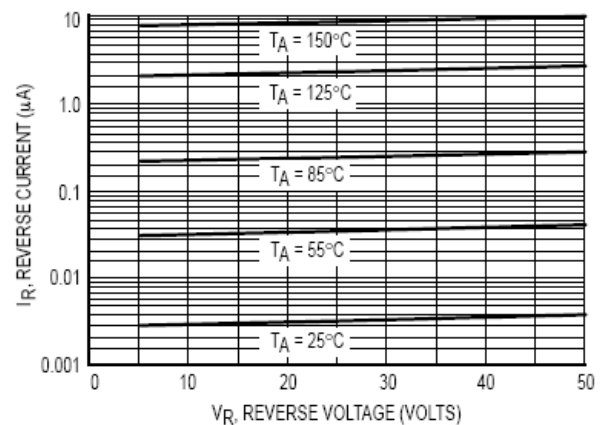
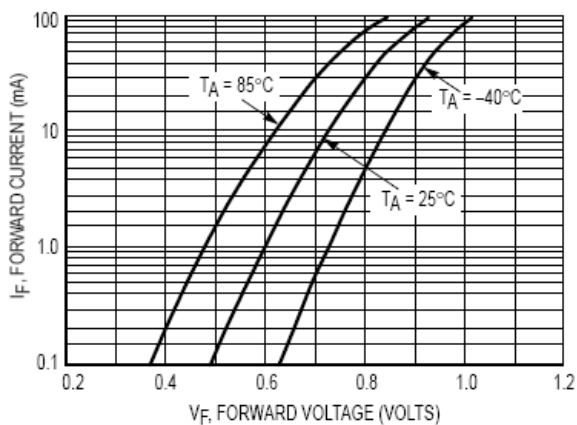
Parameter	Symbol	Limits		Unit
		MMBD2837	MMBD2838	
Non-Repetitive Peak reverse voltage	V_{RM}	75	75	V
DC Reverse Voltage	V_R	30	50	V
Average rectified output Current	I_o	150	100	mA
Power Dissipation	P_d	300		mW
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	417		$^\circ\text{C}/\text{W}$
Junction and Storage temperature	T_J, T_{STG}	-55 to +150		$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

Surface mount switching diode

MMBD2837/MMBD2838

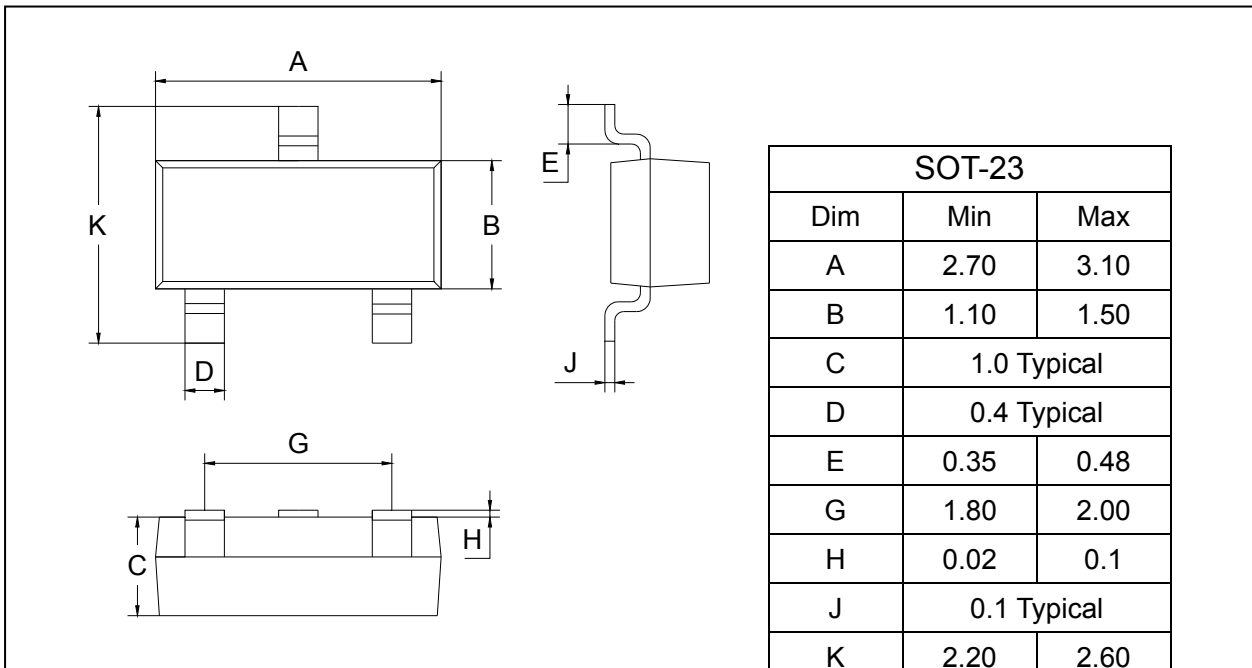
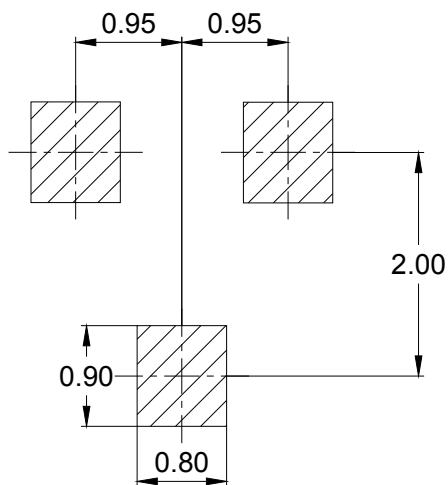
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	$V_{(BR)}$	35			V	$I_{(BR)}=100\mu\text{A}$ MMBD2837
		75			V	$I_{(BR)}=100\mu\text{A}$ MMBD2838
Forward voltage	V_{F1}			1.0	V	$I_R=10\text{mA}$
	V_{F2}			1.0	V	$I_R=50\text{mA}$
	V_{F3}			1.2	V	$I_F=100\text{mA}$
Reverse current	I_R			0.1	μA	$V_R=30\text{V}$ MMBD2837
	I_R			0.1	μA	$V_R=50\text{V}$ MMBD2838
Capacitance between terminals	C_T			4	pF	$V_R=0, f=1\text{MHz}$
Reverse Recovery Time	t_{rr}			4	ns	$I_F=10\text{mA}, V_R=6\text{V}, I_{rr}=0.1 \cdot I_R, R_L=100\Omega$

 TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

PACKAGE OUTLINE

Plastic surface mounted package

SOT-23

Surface mount switching diode

MMBD2837/MMBD2838

SOLDERING FOOTPRINT


Unit : mm

PACKAGE INFORMATION

Device	Package	Shipping
MMBD2837/MMBD2838	SOT-23	3000/Tape&Reel