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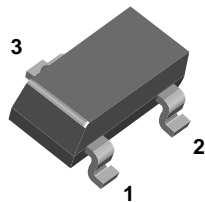
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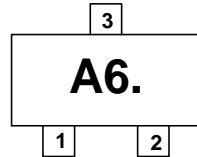
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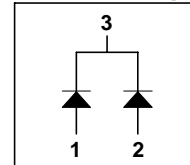
# MMBD2838



SOT-23



Connection Diagram



## Small Signal Diode

### Absolute Maximum Ratings\*

$T_A = 25^\circ\text{C}$  unless otherwise noted

Symbol	Parameter	Value	Units
$V_{RRM}$	Maximum Repetitive Reverse Voltage	75	V
$I_{F(AV)}$	Average Rectified Forward Current	200	mA
$I_{FSM}$	Non-repetitive Peak Forward Surge Current Pulse Width = 1.0 second Pulse Width = 1.0 microsecond	1.0 2.0	A A
$T_{stg}$	Storage Temperature Range	-55 to +150	$^\circ\text{C}$
$T_J$	Operating Junction Temperature	-55 to +150	$^\circ\text{C}$

\*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

#### NOTES:

1) These ratings are based on a maximum junction temperature of 150 degrees C.

2) These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

## Thermal Characteristics

Symbol	Parameter	Value	Units
$P_D$	Power Dissipation	350	mW
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	357	$^\circ\text{C}/\text{W}$

## Electrical Characteristics

$T_A = 25^\circ\text{C}$  unless otherwise noted

Symbol	Parameter	Test Conditions	Min	Max	Units
$V_R$	Breakdown Voltage	$I_R = 100 \mu\text{A}$	75		V
$V_F$	Forward Voltage	$I_F = 50 \text{ mA}$ $I_F = 100 \text{ mA}$		1.0 1.2	V V
$I_R$	Reverse Current	$V_R = 50 \text{ V}$		100	nA
$C_T$	Total Capacitance	$V_R = 0, f = 1.0 \text{ MHz}$		4.0	pF
$t_{rr}$	Reverse Recovery Time	$I_F = I_R = 10 \text{ mA}, I_{RR} = 1.0 \text{ mA}, R_L = 100 \Omega$		4.0	ns

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