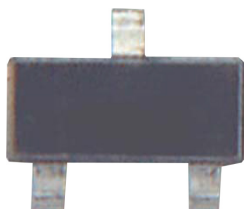
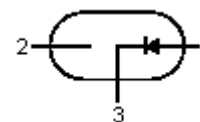


# Low Power Schottky Diode



## Features:

- Very low turn-on voltage and ultra-fast switching diodes, suitable for UHF detectors and other high frequency switching circuits
- Supplied on 8mm tape



Pin Configuration

1 = Anode

2 = NC

3 = Cathode

## Absolute Maximum Ratings:

Description	Symbol		Values	Unit
Continuous reverse voltage	$V_R$	Max.	30	V
Forward current	$I_F$		200	mA
Forward voltage at $I_F = 10\text{mA}$	$V_F$	<	400	mV
Total Power dissipation up to $T_{amb} = 25^\circ\text{C}$	$P_{tot}$	Max.	230	mW
Reverse recovery time when switched from $I_F = 10\text{mA}$ to $I_R = 10\text{mA}$ ; $R_L = 100\Omega$ ; measured at $I_R = 1\text{mA}$	$t_{rr}$	<	5	ns
Junction temperature	$T_j$	Max.	125	$^\circ\text{C}$

## Ratings (at $T_A = +25^\circ\text{C}$ unless otherwise specified)

Description	Symbol		Values	Unit
Continuous reverse voltage	$V_R$	Max.	30	V
Forward current (DC)	$I_F$		200	mA
Forward voltage at $I_F = 10\text{mA}$	$V_F$	<	400	mV
Reverse recovery time when switched from $I_F = 10\text{mA}$ to $I_R = 10\text{mA}$ ; $R_L = 100\Omega$ ; measured at $I_R = 1\text{mA}$	$t_{rr}$	<	5	ns
Junction temperature	$T_j$	Max.	125	$^\circ\text{C}$
Total power dissipation up to $T_{amb} = 25^\circ\text{C}$	$P_{tot}$	Max.	230	mW
Storage temperature	$T_{stg}$	$-55^\circ\text{C}$ to $+150^\circ\text{C}$		
Junction temperature	$T_j$	Max.	125	$^\circ\text{C}$
<b>Thermal Resistance</b>				
From junction to ambient; mounted on a ceramic substrate of $10\text{mm} \times 8\text{mm} \times 0.6\text{mm}$	$R_{th(j-a)}$	=	430	K/W

# Low Power Schottky Diode



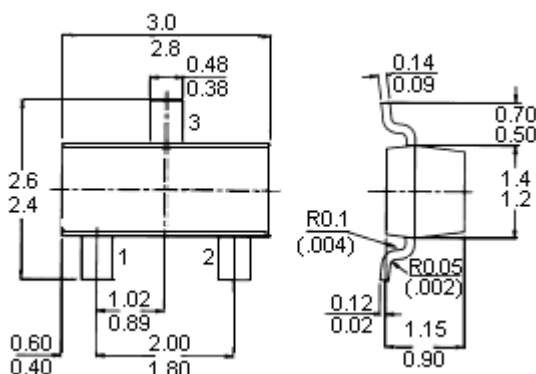
## Characteristics $T_{amb} = 25^{\circ}\text{C}$ unless otherwise specified

Description	Symbol		Values	Unit
Forward voltage $I_F = 0.1\text{mA}$ $I_F = 1\text{mA}^*$ $I_F = 10\text{mA}$ $I_F = 30\text{mA}^*$ $I_F = 100\text{mA}$	$V_F$	Max. Max. Max. Max. Typ. Max.	240 320 400 500 500 1,000	mV
Reverse current $V_R = 25\text{V}$	$I_R$	<	2	$\mu\text{A}$
Reverse breakdown voltage	$V_{(BR)R}$	>	30	V
Diode capacitance $V_R = 1\text{V}$ ; $f = 1\text{MHz}$	$C_d$	<	15	pF
Reverse recovery time when switched from $I_F = 10\text{mA}$ to $I_R = 10\text{mA}$ ; $R_L = 100\Omega$ ; measured at $I_R = 1\text{mA}$	$t_{rr}$	<	5	ns

\* Temperature coefficient of forward voltage:

-0.6% K at  $I_F = 1\text{mA}$

-0.3% K at  $I_F = 30\text{mA}$



Height	Width	Depth
1.12mm	3.05mm	2.5mm

Dimensions : Millimetres

Dimensions : Millimetres

## Part Number Table

Description	Connection	$V_{RRM}$ Max (V)	$I_F$ Max (mA)	$V_F$ Max. (V) at $I_F = 10\text{mA}$	Device Marking	Package	Part Number
Diode, Schottky, SOT-23	Single Diode	30	300	0.4	4L	SOT - 23	TBAT54

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