

## SOT-23 Plastic-Encapsulate Diodes

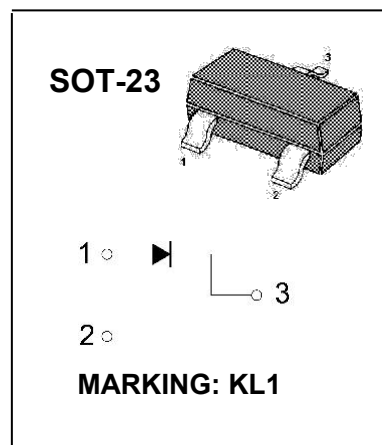
### RB421D SCHOTTKY BARRIER DIODE

#### FEATURES

- Small Surface Mounting Type
- Low  $V_F$
- High Reliability

#### APPLICATIONS

- Low Power Rectification



#### MAXIMUM RATINGS ( $T_a=25^\circ\text{C}$ unless otherwise noted )

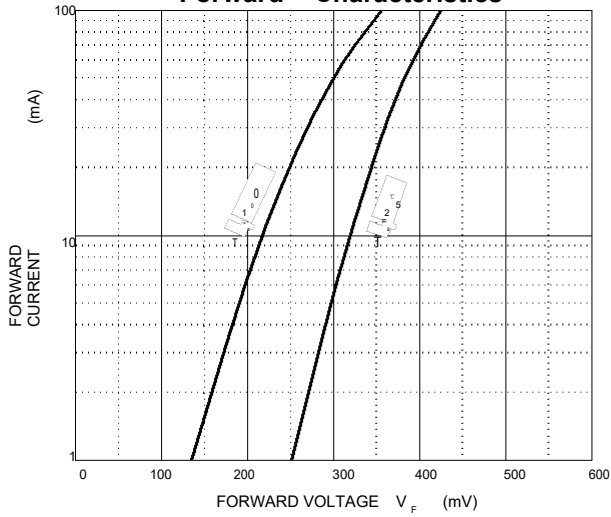
Symbol	Parameter	Value	Unit
$V_R$	DC Blocking Voltage	40	V
$I_O$	Continuous Forward Current	100	mA
$I_{FSM}$	Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	1	A
$P_D$	Power Dissipation	250	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	400	$^\circ\text{C}/\text{W}$
$T_J$	Junction Temperature	125	$^\circ\text{C}$
$T_{stg}$	Storage Temperature	-55~+150	$^\circ\text{C}$

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

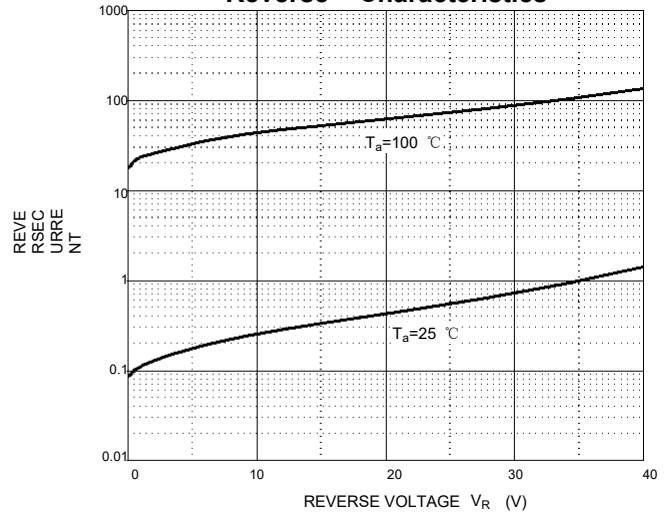
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R=100\mu\text{A}$	40			V
Reverse current	$I_R$	$V_R=10\text{V}$			30	$\mu\text{A}$
Forward voltage	$V_F$	$I_F=100\text{mA}$			0.55	V
		$I_F=10\text{mA}$			0.34	
Total capacitance	$C_{tot}$	$V_R=10\text{V}, f=1\text{MHz}$		6		pF

## Typical Characteristics

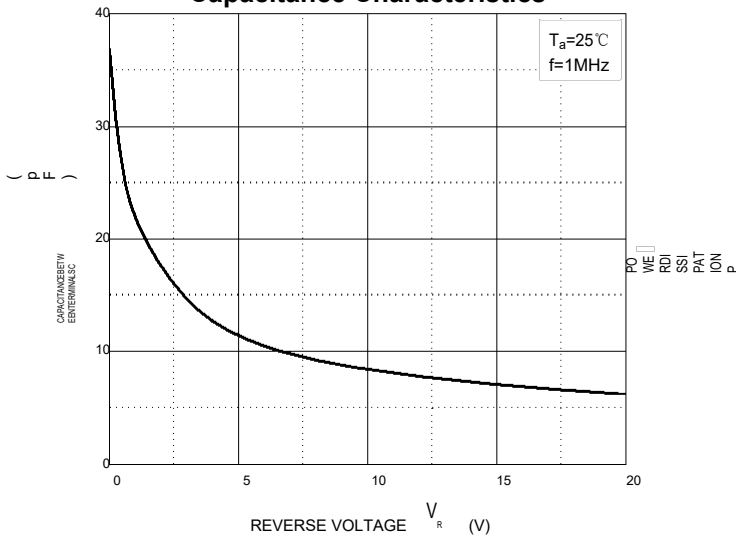
**Forward Characteristics**



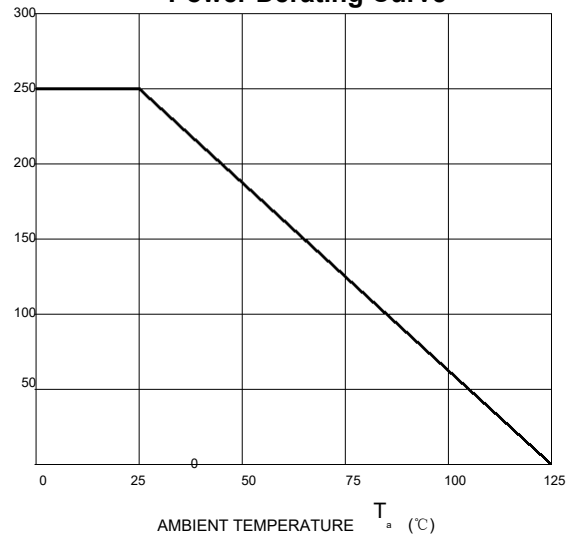
**Reverse Characteristics**



**Capacitance Characteristics**



**Power Derating Curve**



PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-23

