

## Surface Mount Schottky Barrier Diodes

**(Pb)** Lead(Pb)-Free

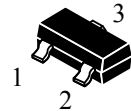
### Features:

- \*Extremely Fast Switching Speed
- \*Low Forward Voltage
- \*Very Small Conduction Losses
- \*Schottky Barrier Diodes Encapsulated in a SOT-23 Package

### Description:

These schottky barrier diodes are designed for high speed switching applications circuit protection, and voltage clamping, Extremely low forward voltage reduces conduction loss, Miniature surface mount package is excellent for hand held and portable applications where space is limited.

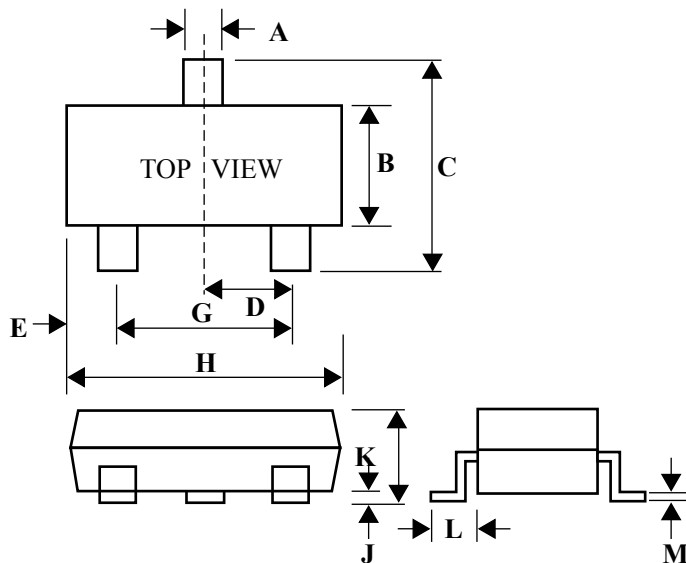
**SMALL SIGNAL  
SCHOTTKY DIODES**  
**200m AMPERES**  
**70 VOLTS**



**SOT-23**

## SOT-23 Outline Dimensions

Unit:mm



Dim	Min	Max
A	0.35	0.51
B	1.19	1.40
C	2.10	3.00
D	0.85	1.05
E	0.46	1.00
G	1.70	2.10
H	2.70	3.10
J	0.01	0.13
K	0.89	1.10
L	0.30	0.61
M	0.076	0.25


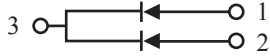

**Maximum Ratings** ( $T_J=125^{\circ}\text{C}$  Unless otherwise noted)

Characteristic	Symbol	Value	Unit
Reverse Voltage	$V_R$	70	Volts
Average Rectifier Forward Current	$I_{F(AV)}$	200	mA
Peak Repetitive Forward Current Rated $V_R$ , Square Wave, 20KHz	$I_{FRM}$	200	mA
Operating Junction Temperature Range	$T_J$	-55 to +125	$^{\circ}\text{C}$
Storage Temperature Range	$T_{stg}$	-55 to +150	$^{\circ}\text{C}$

**Electrical Characteristics** ( $T_A=25^{\circ}\text{C}$  Unless otherwise noted)

Characteristic	Symbol	Min	Max	Unit
Reverse Breakdown Voltage ( $I_R=100\mu\text{A}$ )	$V_{(BR)R}$	70		Volts
Forward Voltage $I_F=1.0\text{mA}$ $I_F=15\text{mA}$	$V_F$		0.41 1.00	Volts
Total Capacitance ( $V_R=0\text{V}$ , $f=1.0\text{MHz}$ )	$C_T$		2	PF
Reverse Leakage $V_R=50\text{V}$	$I_R$		0.1	$\mu\text{A}_{dc}$
Reverse Recover Time $I_F=I_R=10\text{mA}$ , $I_R(\text{Rec})=1.0\text{mA}$	$T_{rr}$		5.0	nS

**Device Marking**

Item	Marking	Equivalent Circuit diagram
BAS70	73	
BAS70-05	75	
BAS70-06	76	
BAS70-04	74	