

Surface Mount Schottky Barrier Diodes

 Lead(Pb)-Free

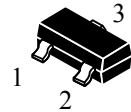
Features:

- *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.

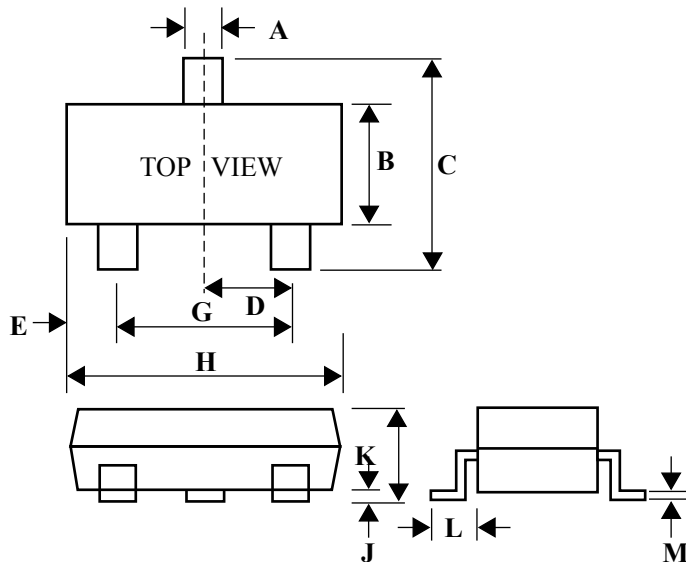
**SMALL SIGNAL
SCHOTTKY DIODES**
200m AMPERES
40 VOLTS



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	40	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 ($I_R=100\mu\text{A}$)	$V_{(BR)R}$	40		Volts
Forward Voltage $I_F=1.0\text{mA}$ $I_F=40\text{mA}$	V_F		0.38 1.0	Volts
Total Capacitance ($V_R=0\text{V}$, $f=1.0\text{MHz}$)	C_T		5	PF
Reverse Leakage $V_R=30\text{V}$	I_R		0.1	μA_{dc}
Reverse Recover Time $I_F=I_R=10\text{mA}$, $I_{R(Rec)}=1.0\text{mA}$	T_{rr}		5.0	nS

Device Marking

Item	Marking	Equivalent Circuit diagram
BAS40	43	
BAS40-05	45	
BAS40-06	46	
BAS40-04	44	