

### Surface Mount Switching Diodes

 Lead(Pb)-Free

#### Features:

- \*Fast Switching Speed
- \*Surface Mount Package Ideally Suited for Automatic Insertion
- \*High Conductance
- \*For General Purpose Switching Applications

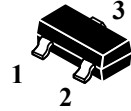
#### Mechanical Data:

- \*Case: SOT-23, Molded Plastic
- \*Terminals: Solderable per MIL-STD-202, Method 208
- \*Polarity: See diagram
- \*Weight: 0.008 grams

**SWITCHING DIODE**

**225m AMPERES**

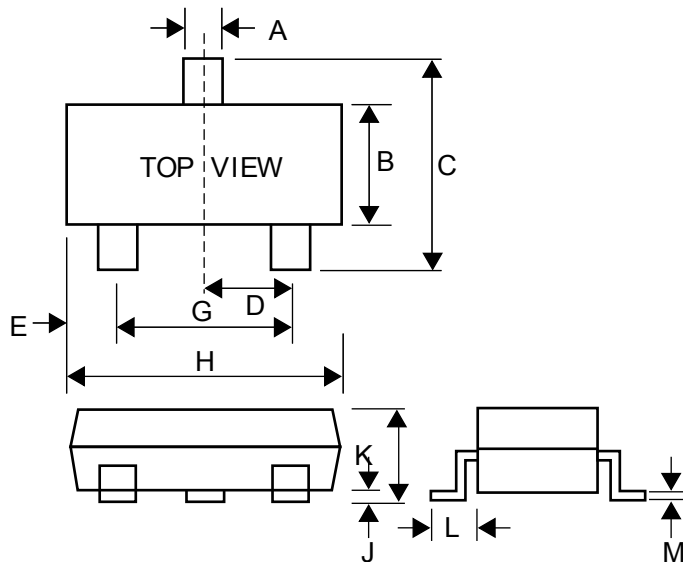
**75 VOLTS**



**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<sub>J</sub>=125°C Unless otherwise noted)

Characteristic	Symbol	Value	Unit
Reverse Voltage	V <sub>R</sub>	75	V
Forward Current	I <sub>F</sub>	200	mA
Power Dissipation	P <sub>D</sub>	225	mW
Operating Junction Temperature Range	T <sub>J</sub>	-55 to +150	°C
Storage Temperature Range	T <sub>stg</sub>	-55 to +150	°C

## Electrical Characteristics (T<sub>J</sub>=125°C Unless otherwise noted)

Characteristic	Symbol	Min	Max	Unit
Reverse Breakdown Voltage I <sub>R</sub> =100μA	V <sub>(BR)</sub>	75	-	V
Forward Voltage I <sub>F</sub> =1mA I <sub>F</sub> =10mA I <sub>F</sub> =50mA I <sub>F</sub> =150mA	V <sub>F</sub>	-	0.9 1.0 1.1 1.25	V
Reverse Leakage V <sub>R</sub> =75V	I <sub>R</sub>	-	5	nA
Total Capacitance V <sub>R</sub> =0V, f=1.0MHz	C <sub>T</sub>	-	2.0	pF
Reverse Recover Time	T <sub>rr</sub>	-	3	μS

## Device Marking

Item	Marking	Equivalent Circuit diagram
BAS116	JV	