

## Surface Mount Schottky Diodes

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

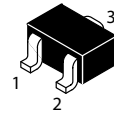
### Features:

- \* Low forward voltage
- \* Fast switching
- \* Ultra-Small Surface Mount Package

### Mechanical Data:

- \* Terminals: Solderable per MIL-STD-202, Method 208
- \* Polarity: See Diagrams Page.2
- \* Marking: See Diagrams Page.2
- \* Weight: 0.006 grams (approx)

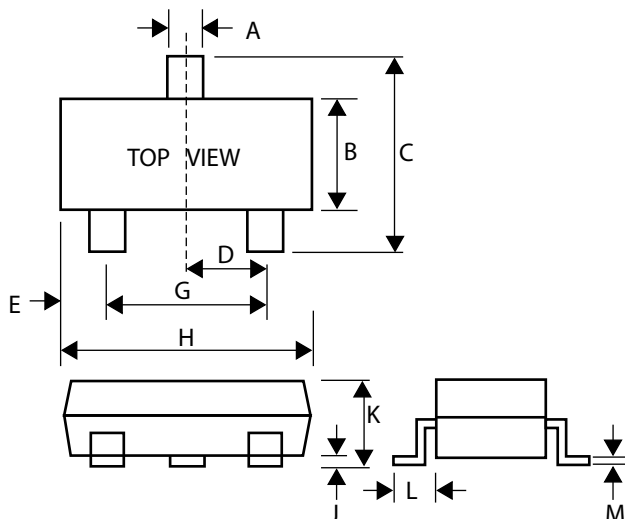
**SCHOTTKY DIODES**  
**200m AMPERES**  
**40 VOLTS**



**SOT-323(SC-70)**

## SOT-323 Outline Dimensions

Unit:mm



SOT-323		
Dim	Min	Max
A	0.30	0.40
B	1.15	1.35
C	2.00	2.40
D	-	0.65
E	0.30	0.40
G	1.20	1.40
H	1.80	2.20
J	0.00	0.10
K	0.80	1.00
L	0.42	0.53
M	0.10	0.25

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

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$	40	V
Working Peak Reverse Voltage	$V_{RRM}$		
DC Blocking Voltage	$V_R$		
Forward Continuous Current	$I_{FM}$	200	mA
Power Dissipation	$P_d$	200	mW
Storage Temperature Range	$T_{STG}$	-55 to + 150	$^{\circ}\text{C}$

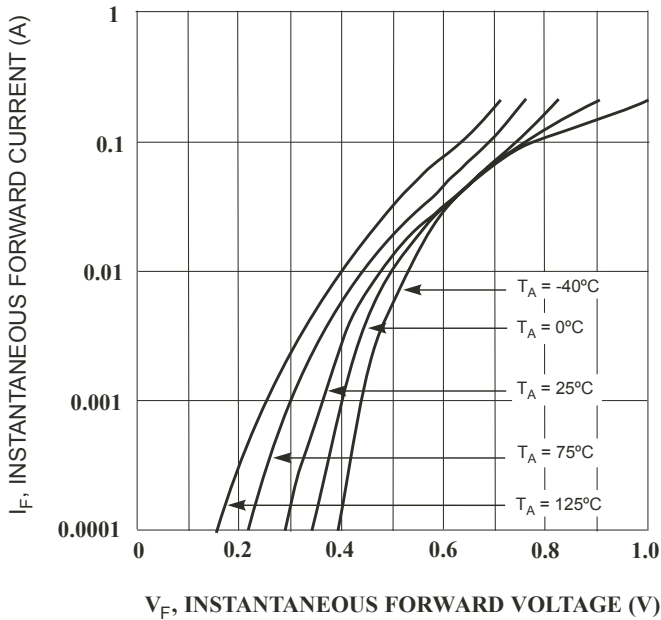
**Electrical Characteristics** ( $T_A=25^{\circ}\text{C}$  Unless otherwise noted)

Characteristic	Symbol	Min	Max	Unit
Reverse Breakdown Voltage $I_R=10\mu\text{A}$	$V_{(BR)R}$	40		V
Forward Voltage $I_F=1\text{mA}$ $I_F=40\text{mA}$	$V_F$		0.38 1.00	V
Total Capacitance ( $V_R=0\text{V}$ , $f=1.0\text{MHz}$ )	$C_T$		5.0	Pf
Reverse Current $V_R=30\text{V}$	$I_R$		0.2	$\mu\text{A}$
Reverse Recover Time $I_F=I_R=10\text{mA}$ , $I_{rr}=0.1 \times I_R$ , $R_L=100\Omega$	$T_{rr}$		5.0	nS

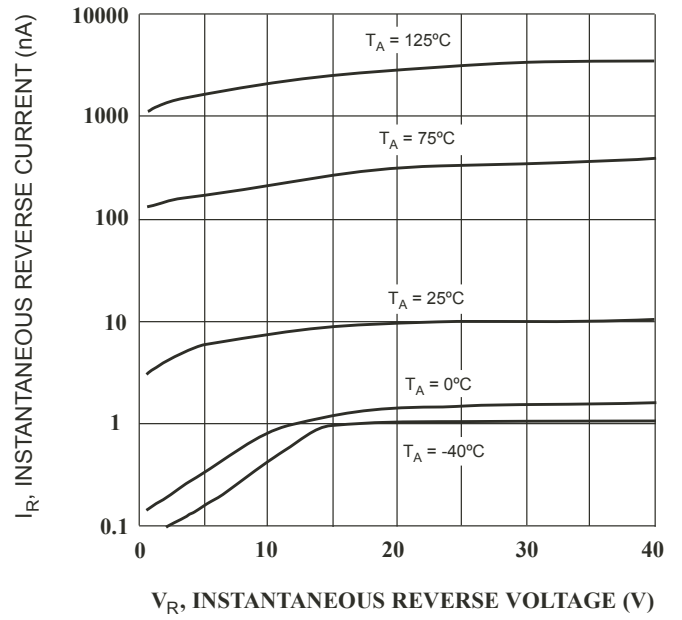
**Device Marking**

Item	Marking	Equivalent Circuit diagram
BAS40W	43h	
BAS40W-04	44	
BAS40W-05	45	
BASW40-06	46	

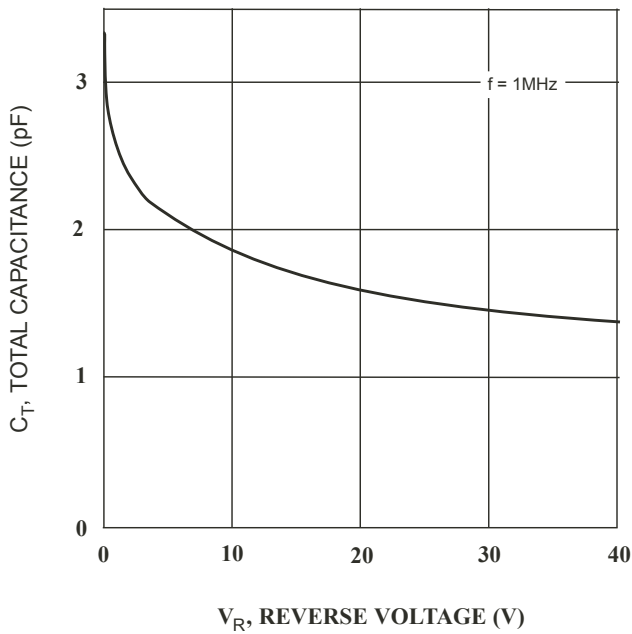
Electrical Characteristic curves(Ta=25 °C)



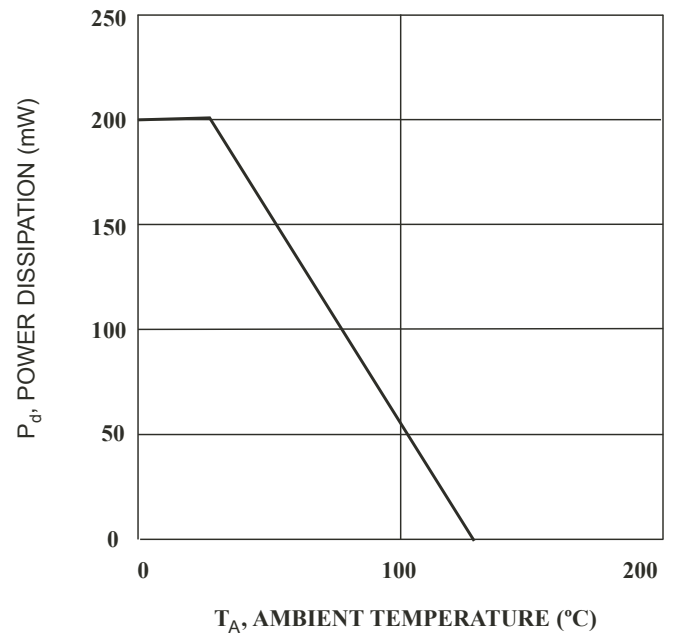
**Fig. 1 Typical Forward Voltage**



**Fig. 2 Typical Reverse Characteristics**



**Fig. 3 Typical Capacitance**



**Fig. 4 Power Derating Curve, Total Package**