

### Surface Mount Schottky Barrier Diodes

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

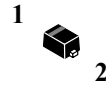
#### Feature:

- \* Silicon Epitaxial Planer
- \* Low Forward Voltage and Low Reverse Current
- \* High Reliability
- \* Schottky Barrier Diodes Encapsulated in a SOD-923 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.

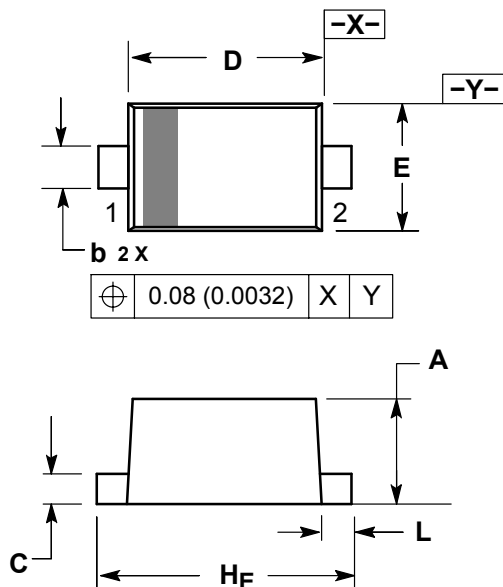
**SMALL SIGNAL  
SCHOTTKY DIODES  
100m AMPERES  
30 VOLTS**



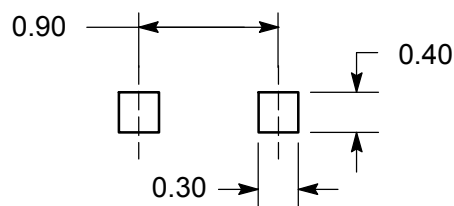
**SOD-923**

### SOD-923 Outline Dimensions

Unit:mm



MILLIMETERS			
DIM	MIN	NOM	MAX
A	0.36	0.40	0.43
b	0.15	0.20	0.25
c	0.07	0.12	0.17
D	0.75	0.80	0.85
E	0.55	0.60	0.65
HE	0.95	1.00	1.05
L	0.05	0.10	0.15




**SOLDERING FOOTPRINT**

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


Characteristic	Symbol	Value	Unit
DC Reverse Voltage	$V_R$	30	V
Average Rectifier Forward Current	$I_O$	100	mA
Peak Forward Surge Current <sup>(1)</sup>	$I_{FSM}$	500	mA
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	520	$^{\circ}\text{C}/\text{W}$
Power Dissipation	PD	150	mW
Operation Junction Temperature Range	$T_J$	150	$^{\circ}\text{C}$
Storage Temperature Range	$T_{stg}$	-40 to +150	$^{\circ}\text{C}$

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

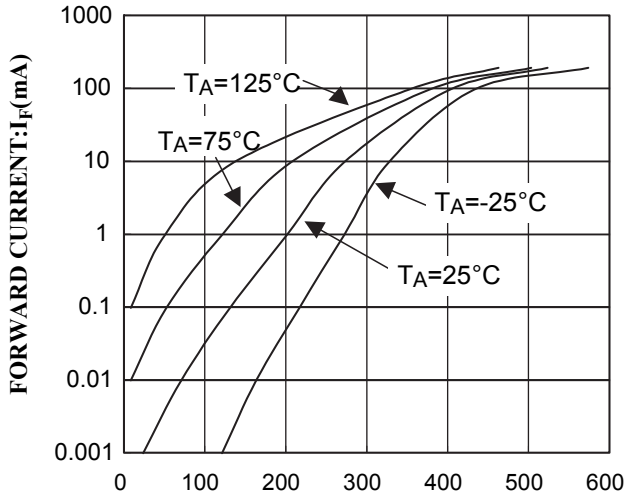
Characteristic	Symbol	Min	Typ	Max	Unit
Forward Voltage $I_F=10\text{mA}$	$V_F$	-	-	0.35	V
Reverse Leakage $V_R=10\text{V}$	$I_R$	-	-	10	$\mu\text{A}$

NOTE: 1.60HZ for 1 

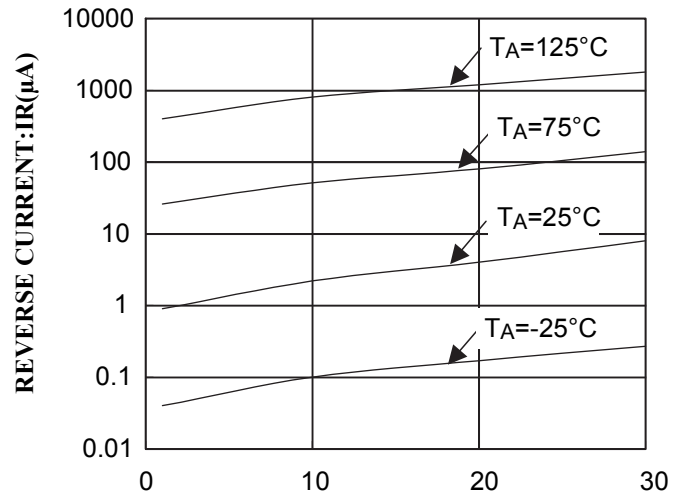
## Device Marking

Item	Marking	Equivalent Circuit diagram
WSD521D	F	

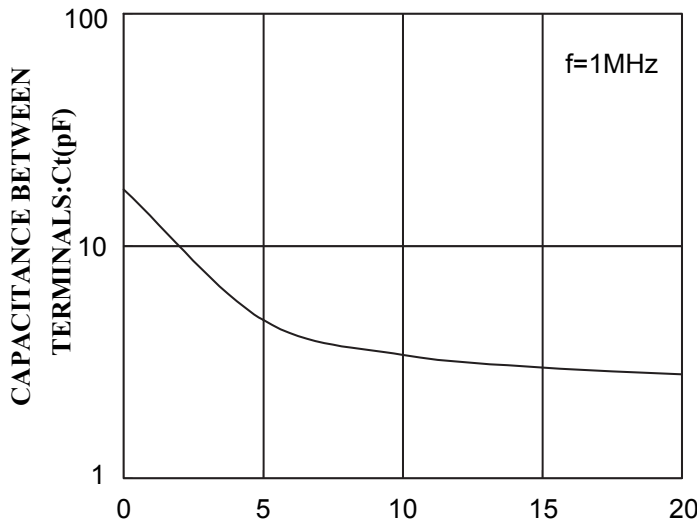
**Electrical Characteristic Curves** ( $T_A=25^\circ\text{C}$ )



VF-IF CHARACTERISTICS  
Fig.1 FORWARD VOLTAGE :  $V_F$ (mV)



VR-IR CHARACTERISTICS  
Fig.2 REVERSE VOLTAGE:  $V_R$ (V)



VR- $C_t$  CHARACTERISTICS  
Fig.3 REVERSE VOLTAGE:  $V_R$ (V)