

Surface Mount Schottky Barrier Diodes

(Pb) Lead(Pb)-Free

* Halogen 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.

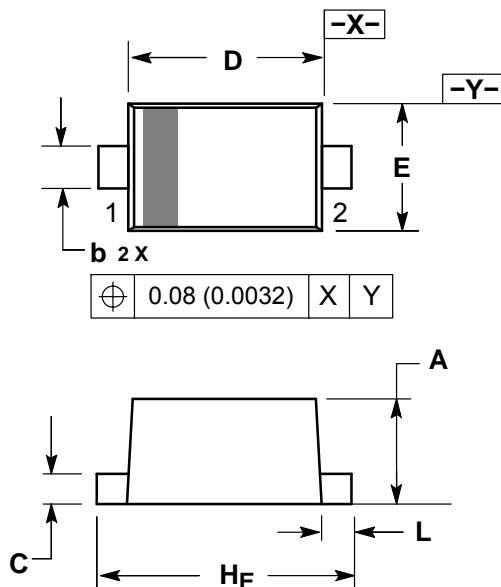
**SMALL SIGNAL
SCHOTTKY DIODES
30m AMPERES
40 VOLTS**



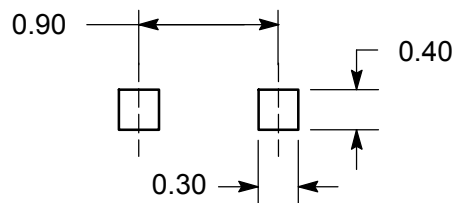
SOD-923

SOD-923 Outline Dimensions

Unit:mm



MILLIMETERS			
DIM	MIN	NOM	MAX
A	0.34	0.39	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
Repetitive Peak Reverse Voltage	V_{RM}	40	V
DC Reverse Voltage	V_R	30	V
Average Rectifier Forward Current	I_O	30	mA
Peak Forward Surge Current ⁽¹⁾	I_{FSM}	200	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	125	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	-40 to +125	$^{\circ}\text{C}$

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

Characteristic	Symbol	Min	Typ	Max	Unit
Forward Voltage $I_F=1\text{mA}$	V_F	-	-	0.37	V
Reverse Leakage $V_R=30\text{V}$	I_R	-	-	0.5	μA
Capacitance between terminals $V_R=1\text{V}$, $f=1\text{MHz}$	C_t	-	2	-	pF

Device Marking

Item	Marking	Equivalent Circuit diagram
WSD751D	5	

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

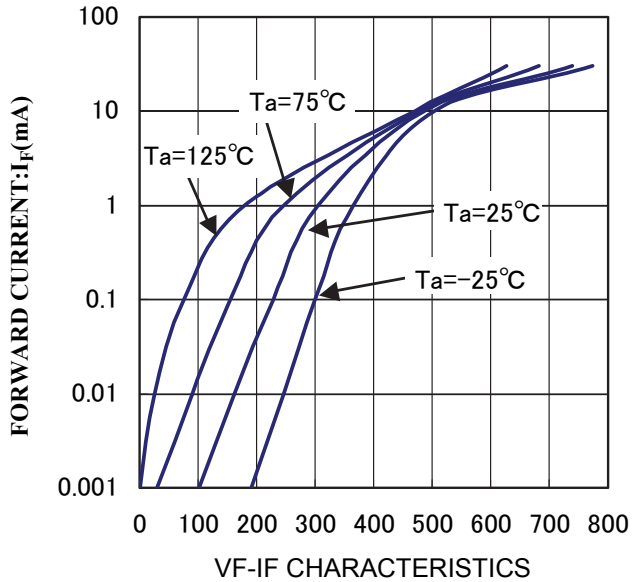


Fig.1 FORWARD VOLTAGE : V_F (mV)

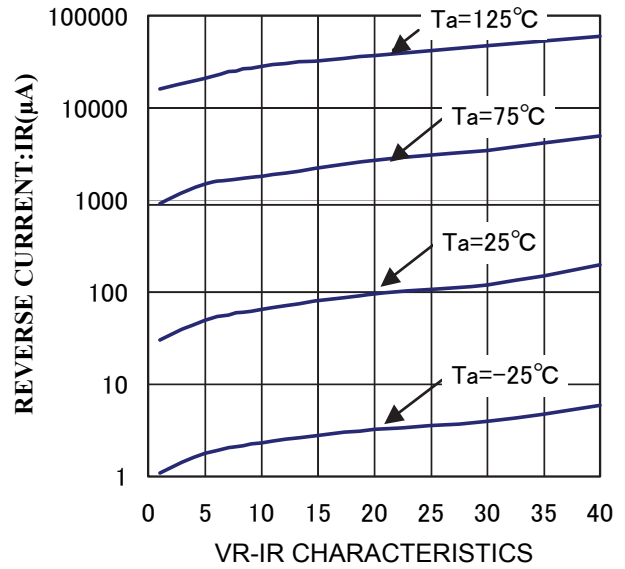


Fig.2 REVERSE VOLTAGE: V_R (V)

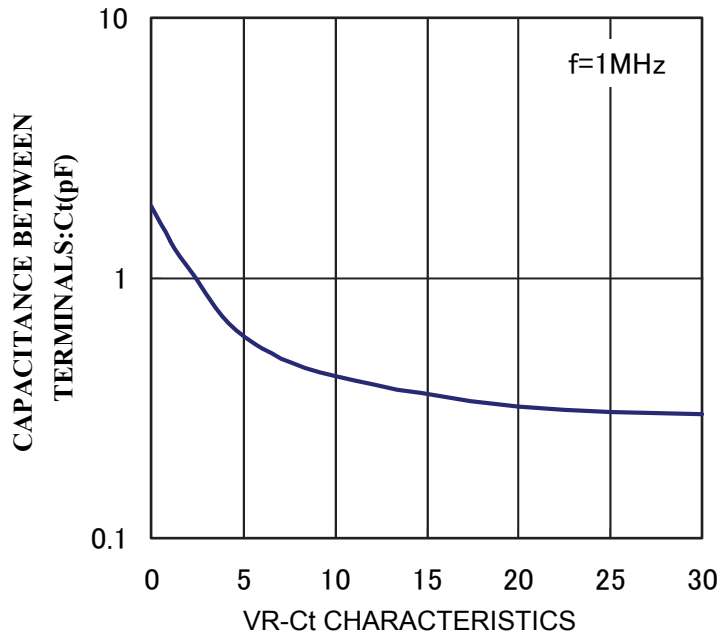


Fig.3 REVERSE VOLTAGE: V_R (V)