

## Surface Mount Schottky Barrier Diodes

 Lead(Pb)-Free

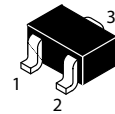
### Features:

- \*Extremely Fast Switching Speed
- \*Low Forward Voltage
- \*Very Small Conduction Losses
- \*Schottky Barrier Diodes Encapsulated in a SOT-323 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.

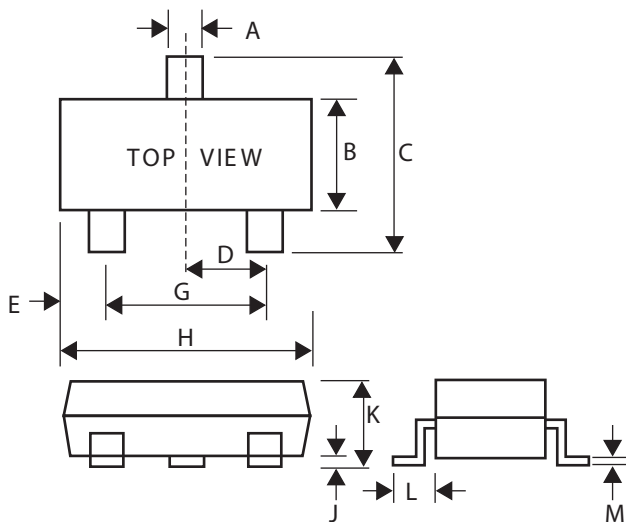
SMALL SIGNAL  
SCHOTTKY DIODES  
30m AMPERES  
40-45 VOLTS



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

## SOT-323 Outline Demensions

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)

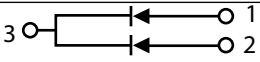
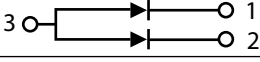
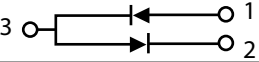
Characteristic	Symbol	WSD715	WSD717F	WSD706F	Unit
Reverse Voltage	$V_R$	40		45	Volts
Average Rectifier Forward Current	$I_{F(AV)}$	30			mA
Peak Surge Forward Current(1)	$I_{FSM}$	200			mA
Operating Junction Temperature Range	$T_J$	-55 to +125			$^{\circ}\text{C}$
Storage Temperature Range	$T_{stg}$	-55 to +125			$^{\circ}\text{C}$

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

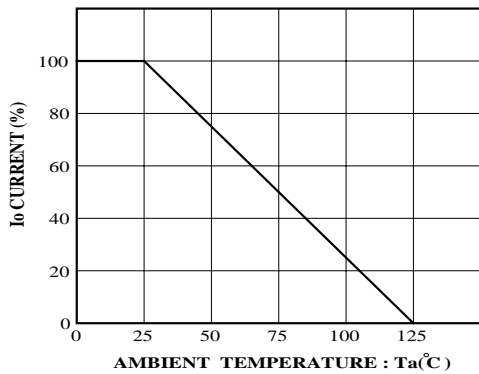
Characteristic	Symbol	Min	Typ	Max	Unit
Reverse Breakdown Voltage ( $I_R=10\mu\text{A}$ ) WSD715F/WSD717F WSD706F	$V_{(BR)R}$	40 45			Volts
Forward Voltage $I_F=1.0\text{mA}$	$V_F$			0.37	Volts
Total Capacitance ( $V_R=1.0\text{V}, f=1.0\text{MHz}$ )	$C_T$		2.0	-	Pf
Reverse Leakage $V_R=10\text{V}$	$I_R$			1.0	$\mu\text{A}_{dc}$

1. 60HE for 1 

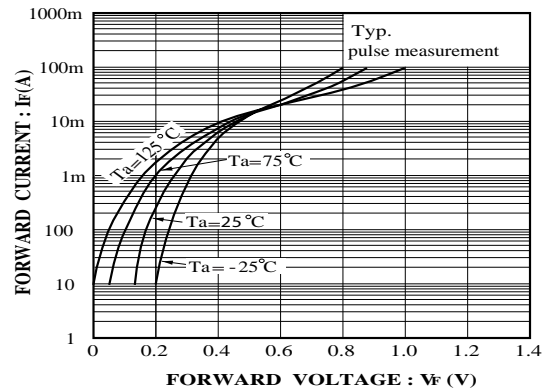
**Device Marking**

Item	Marking		Equivalent Circuit diagram
WSD715F	JD	3D	
WSD717F	JE	3E	
WSD706	JF	3J	

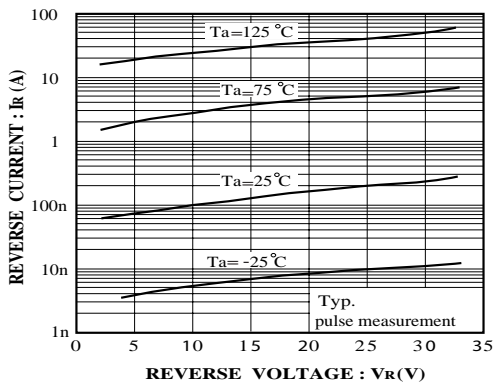
Electrical characteristic curves(Ta=25 °C)



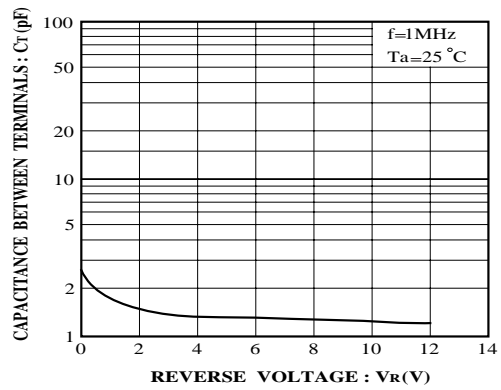
**FIG1. Derating curve**  
(mounting on glass epoxy PCBs)



**FIG2. Forward characteristics**



**FIG3. Reverse characteristics**



**FIG4. Capacitance between terminals characteristics**