

Surface Mount Schottky Barrier Diodes

* "G" Lead(Pb)-Free

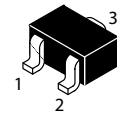
Features:

- *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.

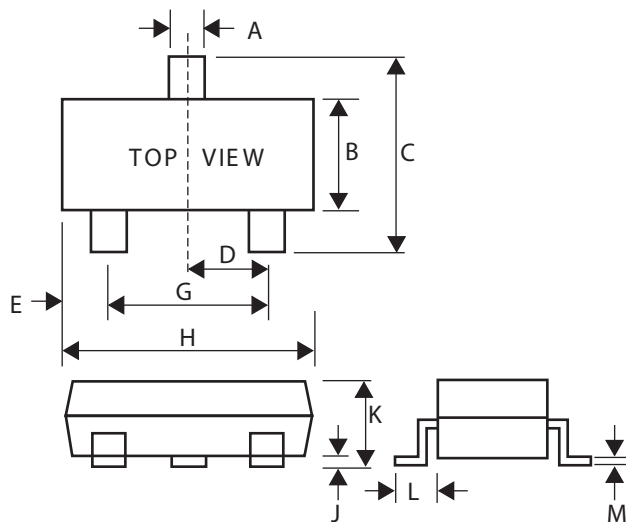
**SMALL SIGNAL
SCHOTTKY DIODES**
30m AMPERES
40-45 VOLTS



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)

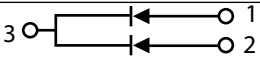
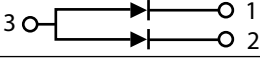
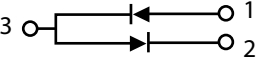
Characteristic	Symbol	WSD715	WSD717F	WSD706F	Unit
Reverse Voltage	V_R	40		45	Volts
Average Rectifier Forward Current	$I_{F(AV)}$	30			mA
Peak Surge Forward Current(1)	I_{FSM}	200			mA
Operating Junction Temperature Range	T_J	-55 to +125			$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	-55 to +125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

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	μA_{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)

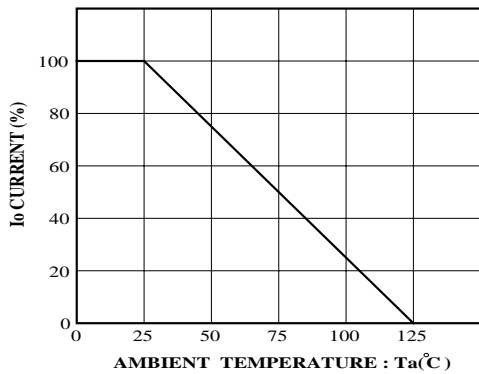


FIG1. Derating curve
(mounting on glass epoxy PCBs)

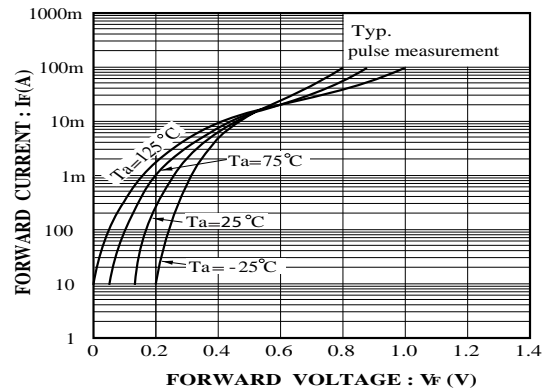


FIG2. Forward characteristics

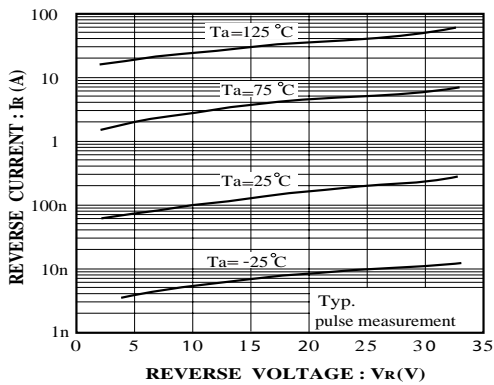


FIG3. Reverse characteristics

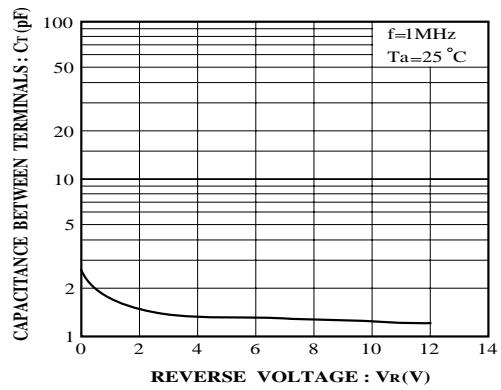


FIG4. Capacitance between terminals characteristics