

Surface Mount Schottky Barrier Diodes

(Pb) Lead(Pb)-Free

Applications:

*Low Current Rectification and High Speed Switching

Feature:

*Extremely small Surface Mounting Type (SOD-523)

* $I_O=200mA$ Guaranteed Despite the Size

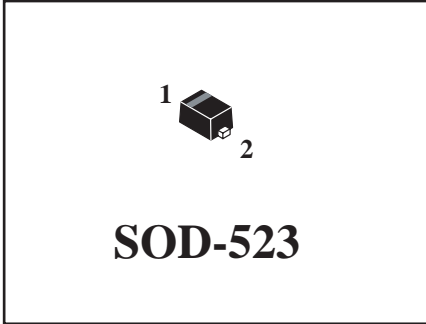
*Low V_F

Construction:

*Silicon Epitaxial Planar

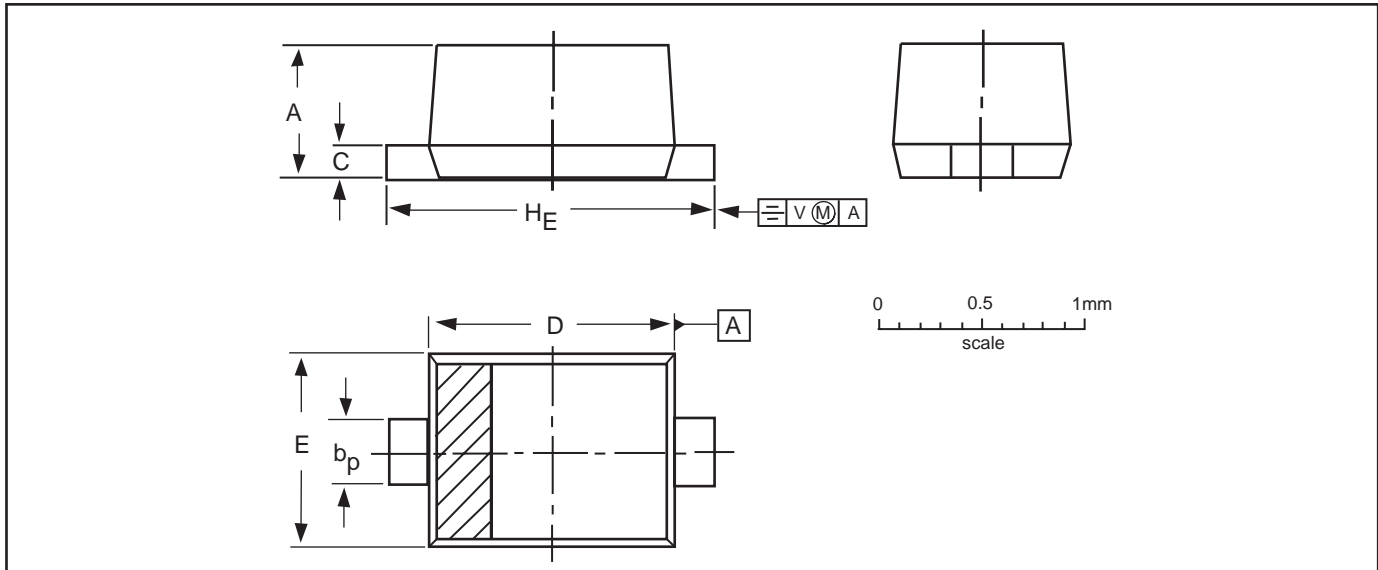
*We Declare that the Material of Product Compliance with RoHS Requirements

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



SOD-523 Outline Dimensions


Unit:mm



DIMENSIONS (mm are the original dimensions)

UNIT		A	b_p	c	D	E	H_E	V
mm	max	0.7	0.35	0.2	1.3	0.9	1.7	0.15
	min	0.5	0.25	0.1	1.1	0.7	1.5	

Note1. The marking bar indicates the cathode.

OUTLINE VERSION	REFERENCES			EUROPEAN PROJECTION	ISSUE DATE
	IEC	JEDEC	EIAJ		
SOD-523			SC-79		98-11-25

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


Characteristic	Symbol	Value	Unit
DC Reverse Voltage	V_R	40	V
Mean Rectifying Current	I_o	200	mA
Peak Forward Surge Current ⁽¹⁾	I_{FSM}	4	A
Junction Temperature	T_J	125	$^{\circ}\text{C}$
Storage Temperature	T_{stg}	-55 to +125	$^{\circ}\text{C}$

NOTE: 1. 60HZ for 1

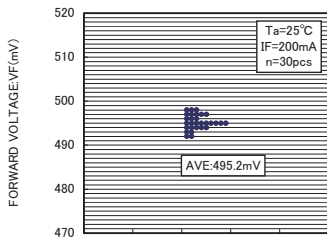
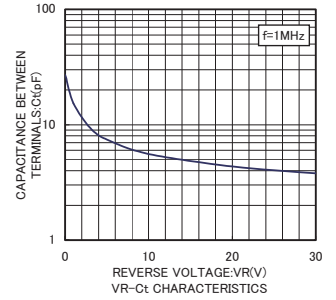
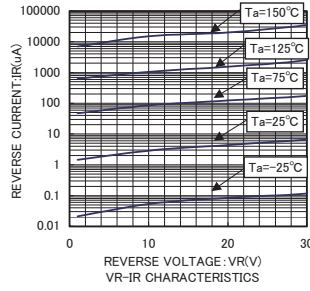
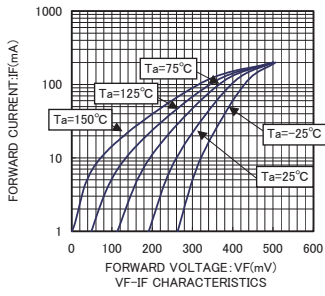
Electrical Characteristics ($T_A=25^{\circ}\text{C}$ Unless otherwise noted)

Characteristic	Symbol	Min	Max	Unit
Forward Voltage $I_F = 10\text{mA}$ $I_F = 100\text{mA}$ $I_F = 200\text{mA}$	V_F	0.16 0.31 0.37	0.30 0.45 0.52	V
Reverse Current $V_R = 10\text{V}$ $V_R = 40\text{V}$	I_R	- -	20 90	μA
ESD Break Down Voltage $C=100\text{pF}, R=1.5\text{K}\Omega$ Forward and Reverse.1 Time	ESD	8	-	KV

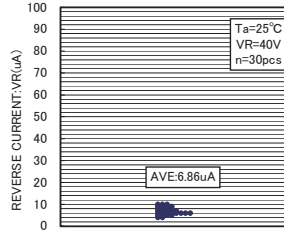
Device Marking

Item	Marking	Equivalent Circuitdiagram
WSD521S-40	S	

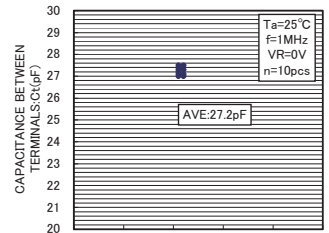
Electrical characteristic curves(Ta=25°C)



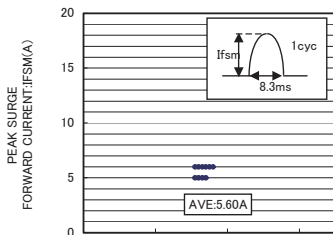
VF DISPERSION MAP



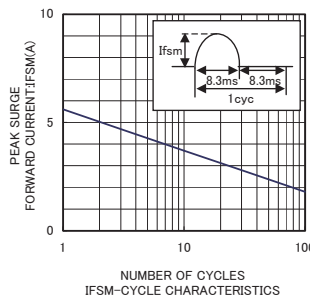
IR DISPERSION MAP



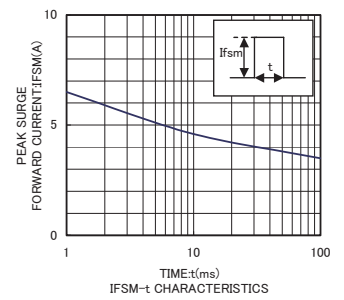
Ct DISPERSION MAP



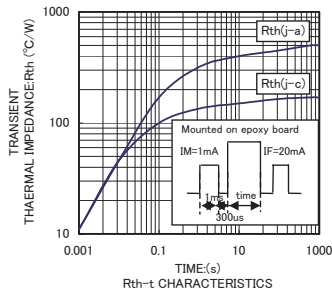
IFSM DISPERSION MAP



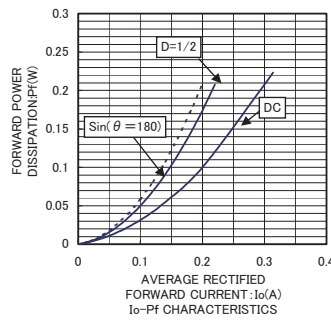
IFSM-CYCLE CHARACTERISTICS



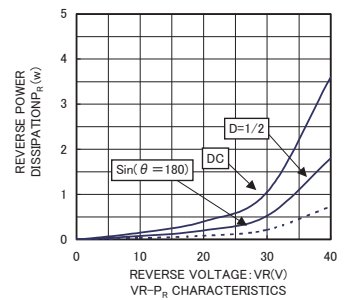
IFSM-t CHARACTERISTICS



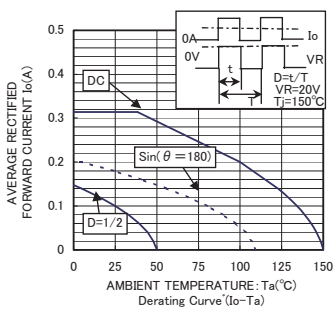
Rth-t CHARACTERISTICS



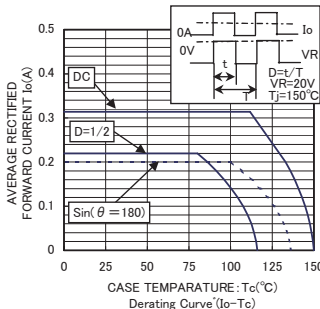
Io-PF CHARACTERISTICS



VR-Pf CHARACTERISTICS



Derating Curve (Io-Ta)



Derating Curve (Io-Tc)