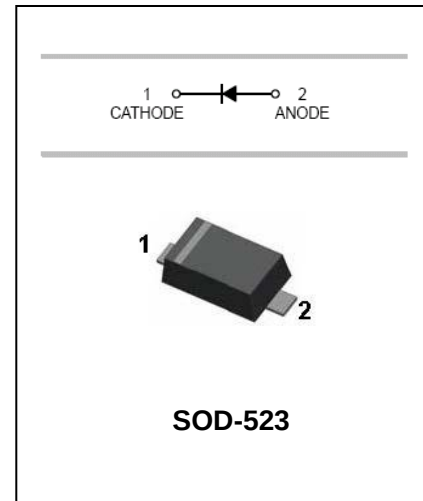


Schottky Barrier Diode

B0530WT

FEATURES

- Low forward voltage drop.
- Guard ring construction for transient Protection.
- High conductance.



APPLICATIONS

- 0.5A surface mount schottky barrier rectifier.

ORDERING INFORMATION

Type No.	Marking	Package Code
B0530WT□	SE	SOD-523

□: none is for Lead Free package;

“G” is for Halogen Free package

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	30	V
Working Peak Reverse Voltage	V_{RWM}		
DC Reverse Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	21	V
Average Rectified Output Current @ $T_L = 100^\circ\text{C}$	I_O	0.5	A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	2	A
Power Dissipation	P_D	250	mW
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	400	$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_J, T_{stg}	-65 to +125	$^\circ\text{C}$

Schottky Barrier Diode

B0530WT

ELECTRICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Value	Unit	Test Conditions
Minimum Reverse Breakdown Voltage	$V_{(BR)R}$	30	V	$I_R=130\mu\text{A}$
Maximum Forward Voltage Drop	V_{FM}	0.375 0.430	V	$I_F=0.1\text{A}, T_j=25^\circ\text{C}$ $I_F=0.5\text{A}, T_j=25^\circ\text{C}$
Maximum Leakage Current	I_{RM}	20 130	μA	$V_R=15\text{V}, T_j=25^\circ\text{C}$ $V_R=30\text{V}, T_j=25^\circ\text{C}$
Junction Capacitance	C_J	170	pF	$f=1\text{MHz}, V_R=0\text{V}$ DC

TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

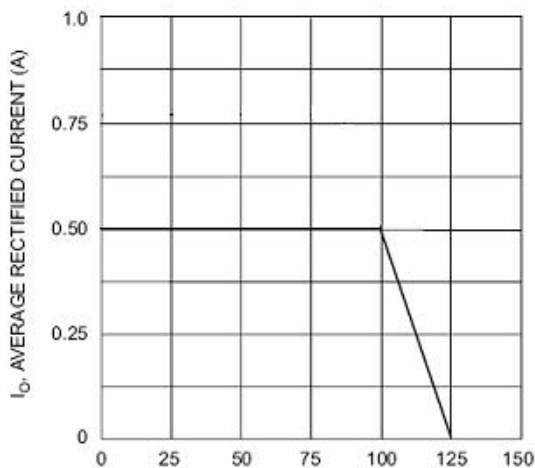


Fig. 1 Forward Current Derating Curve

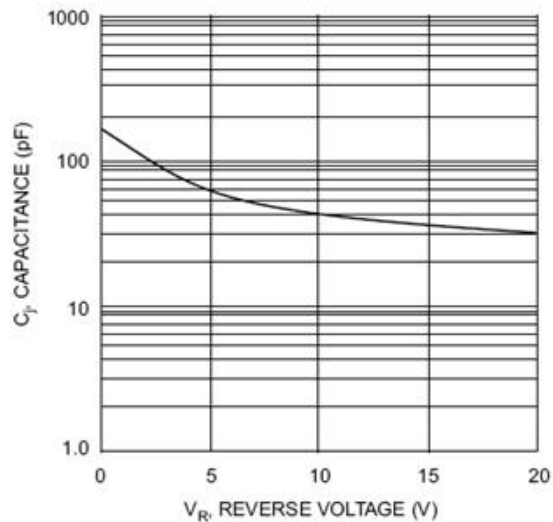


Fig. 2 Typ. Junction Capacitance vs Reverse Voltage

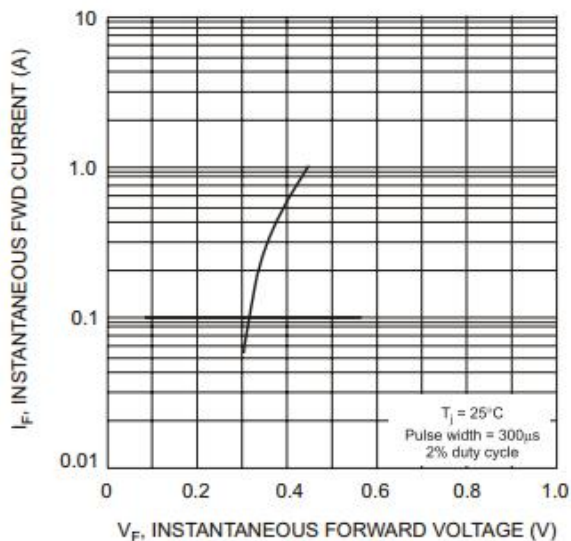


Fig. 3 Typical Forward Characteristics

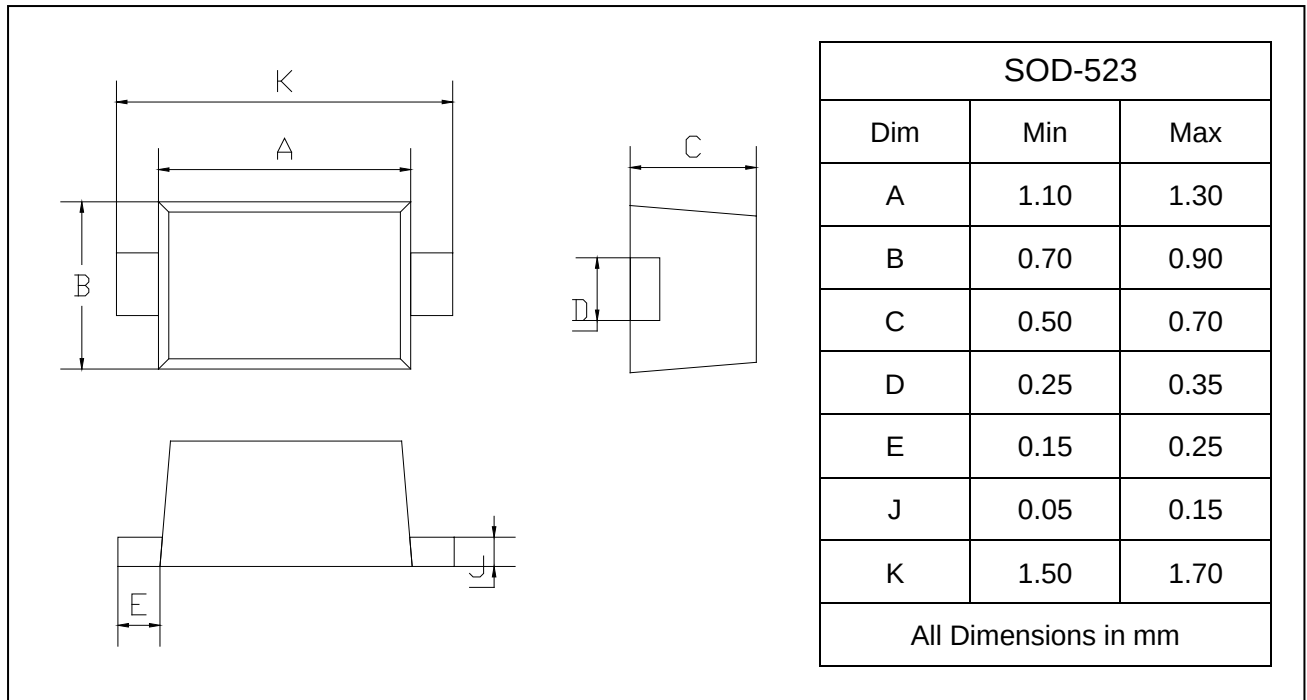
Schottky Barrier Diode

B0530WT

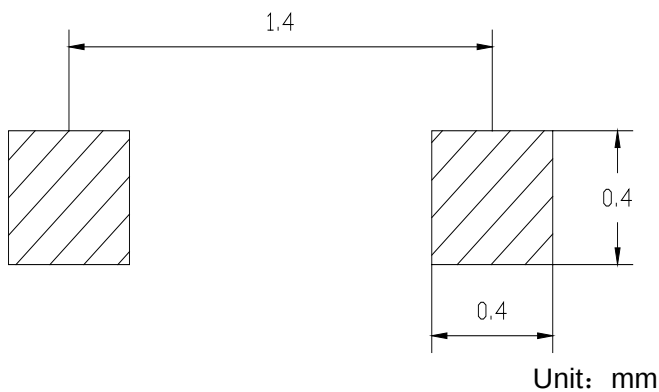
PACKAGE OUTLINE

Plastic surface mounted package

SOD-523



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
B0530WT	SOD-523	3000/Tape&Reel