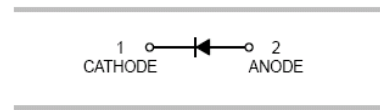


Schottky Barrier Diode

SD0530WT

FEATURES

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



APPLICATIONS

- 0.5A surface mount schottky barrier rectifier.

SOD-523

ORDERING INFORMATION

Type No.	Marking	Package Code
SD0530WT	SE	SOD-523

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}	5.5	A
Power Dissipation	P_d	200	mW
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	244	$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{stg}	-65 to +125	$^\circ\text{C}$
Voltage Rate of Change	dv/dt	1000	V/ μs

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

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

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

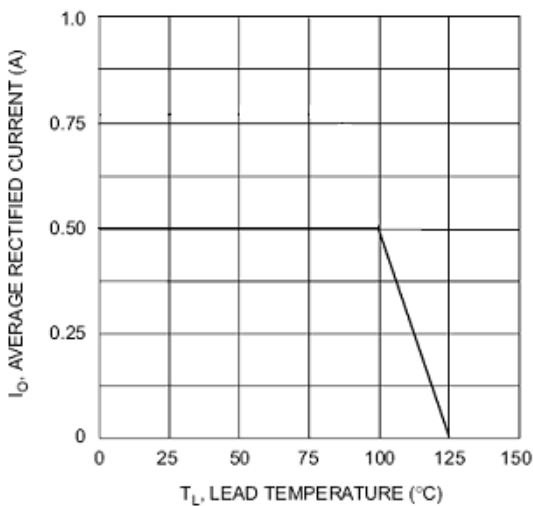


Fig. 1 Forward Current Derating Curve

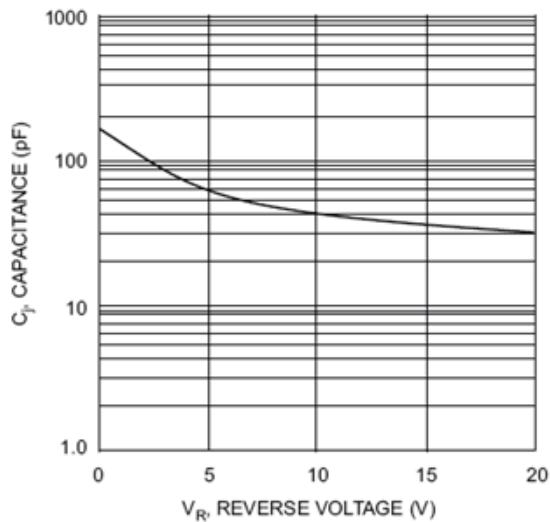


Fig. 2 Typ. Junction Capacitance vs Reverse Voltage

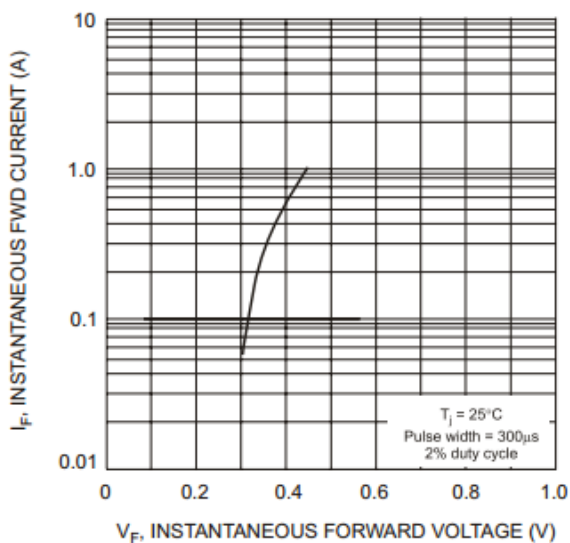


Fig. 3 Typical Forward Characteristics

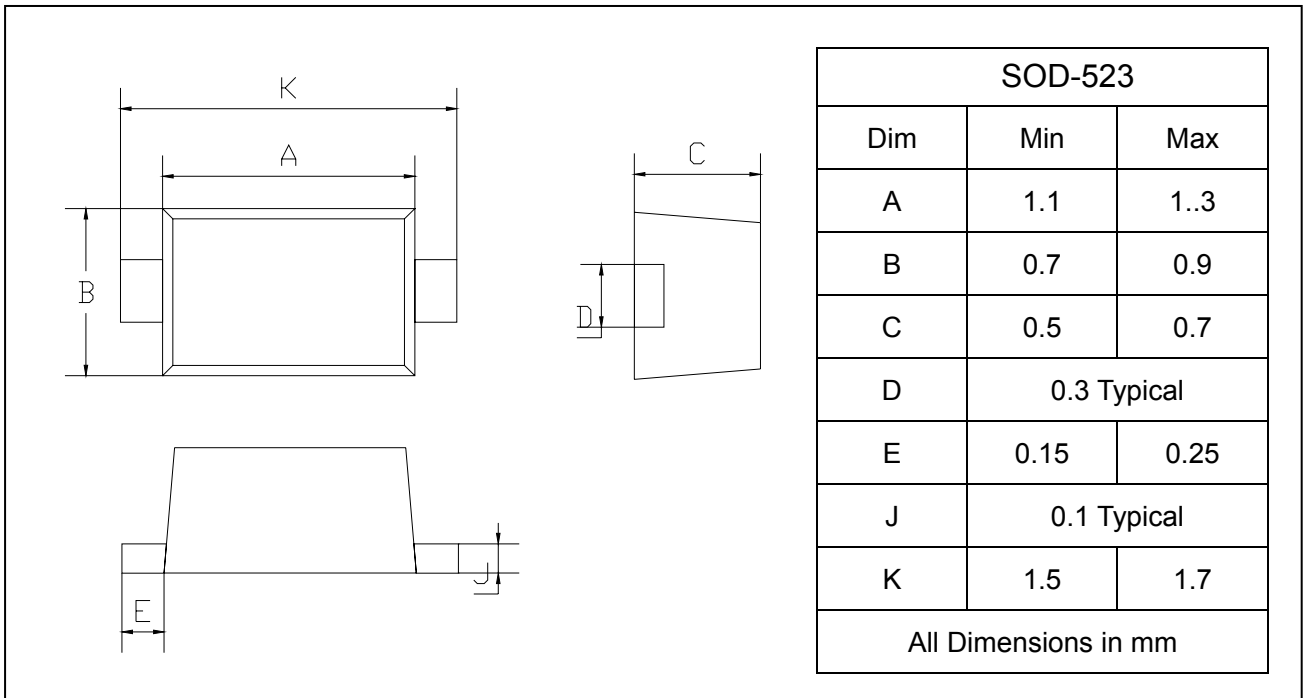
Schottky Barrier Diode

SD0530WT

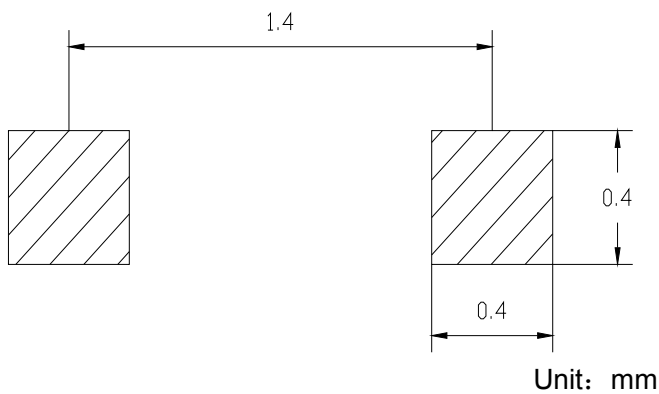
PACKAGE OUTLINE

Plastic surface mounted package

SOD-523



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
SD0530WT	SOD-523	3000/Tape&Reel