



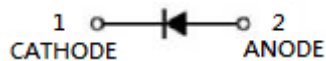
DESCRIPTION

The SDM20U40 is available in SOD-523 package

ORDERING INFORMATION

Package Type	Part Number
SOD-523	SDM20U40
Note	SQP: 3,000pcs/Reel
AiT provides all RoHS Compliant Products	

PIN DESCRIPTION



FEATURES

- Low Forward Voltage Drop
- Guard Ring Construction For Transient Protection
- Negligible Reverse Recovery Time
- Low Reverse Capacitance
- RoHS Compliant
- Available in SOD-523 package

APPLICATIONS

- Schottky barrier switching.



ABSOLUTE MAXIMUM RATINGS

@ $T_A=25^\circ\text{C}$, unless otherwise specified

V_{RR} , Peak Repetitive Peak Reverse Voltage	
V_{RWM} , Working Peak	40V
V_R , DC Reverse Voltage	
$V_{R(RMS)}$, RMS Reverse Voltage	28V
I_F , Forward Continuous Current	250mA
I_{FRM} , Repetitive Peak Forward Current @ $t \leq 1.0\text{s}$	1.5A
P_D , Power Dissipation	400mW
$R_{\theta JA}$, Thermal Resistance Junction to Ambient	300°C/W
T_{STG} , Storage temperature	-65°C ~+125°C

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

ELECTRICAL CHARACTERISTICS

@ $T_A=25^\circ\text{C}$, unless otherwise specified

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R=10\mu\text{A}$	40			V
Forward voltage	V_F	$I_F=20\text{mA}$ $I_F=200\text{mA}$			0.37 0.60	V
Reverse current	I_{RM}	$V_R=30\text{V}$			5.0	μA
Capacitance between terminals	C_T	$V_R=0$, $f=1\text{MHz}$		50		pF
Reverse Recovery Time	t_{rr}	$I_R=I_F=200\text{mA}$ $I_{rr}=0.1*I_R$, $R_L=100\Omega$		10		ns



TYPICAL CHARACTERISTICS

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Figure 1. Typical Forward Characteristics

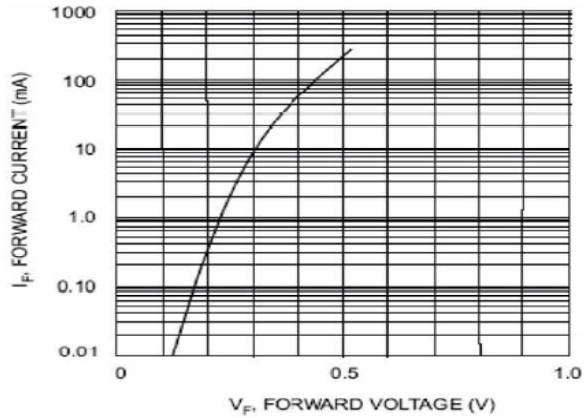
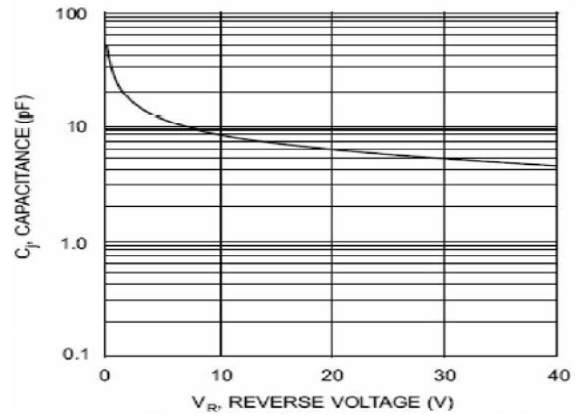


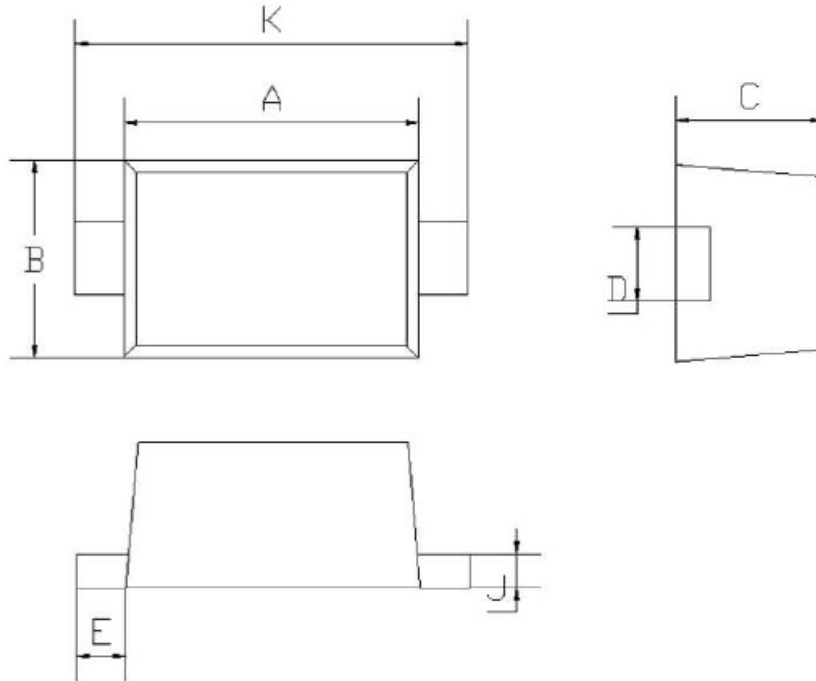
Figure 2. Typ. Junction Capacitance vs. Reverse Voltage





PACKAGE INFORMATION

Dimension in SOD-523 (Unit: mm)



DIM	MIN	MAX
A	1.10	1.30
B	0.70	0.90
C	0.50	0.70
D	0.30 TYP	
E	0.15	0.25
J	0.10 TYP	
K	1.50	1.70



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