



## 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<sub>A</sub>=25°C, unless otherwise specified

V <sub>RR</sub> , Peak Repetitive Peak Reverse Voltage	
V <sub>RWM</sub> , Working Peak	40V
V <sub>R</sub> , DC Reverse Voltage	
V <sub>R(RMS)</sub> , RMS Reverse Voltage	28V
I <sub>F</sub> , Forward Continuous Current	250mA
I <sub>FRM</sub> , Repetitive Peak Forward Current @t≤1.0s	1.5A
P <sub>D</sub> , Power Dissipation	400mW
R <sub>θJA</sub> , Thermal Resistance Junction to Ambient	300°C/W
T <sub>STG</sub> , 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<sub>A</sub>=25°C, unless otherwise specified

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	V <sub>(BR)R</sub>	I <sub>R</sub> =10μA	40			V
Forward voltage	V <sub>F</sub>	I <sub>F</sub> =20mA I <sub>F</sub> =200mA			0.37 0.60	V
Reverse current	I <sub>RM</sub>	V <sub>R</sub> =30V			5.0	μA
Capacitance between terminals	C <sub>T</sub>	V <sub>R</sub> =0, f=1MHz		50		pF
Reverse Recovery Time	t <sub>rr</sub>	I <sub>R</sub> =I <sub>F</sub> =200mA I <sub>rr</sub> =0.1*I <sub>R</sub> , R <sub>L</sub> =100Ω		10		ns



## TYPICAL CHARACTERISTICS

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

Figure 1. Typical Forward Characteristics

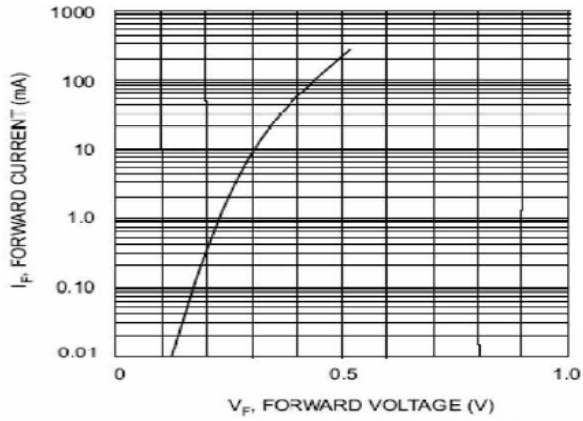
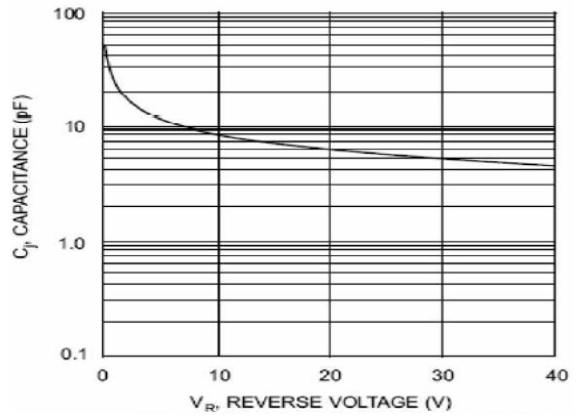


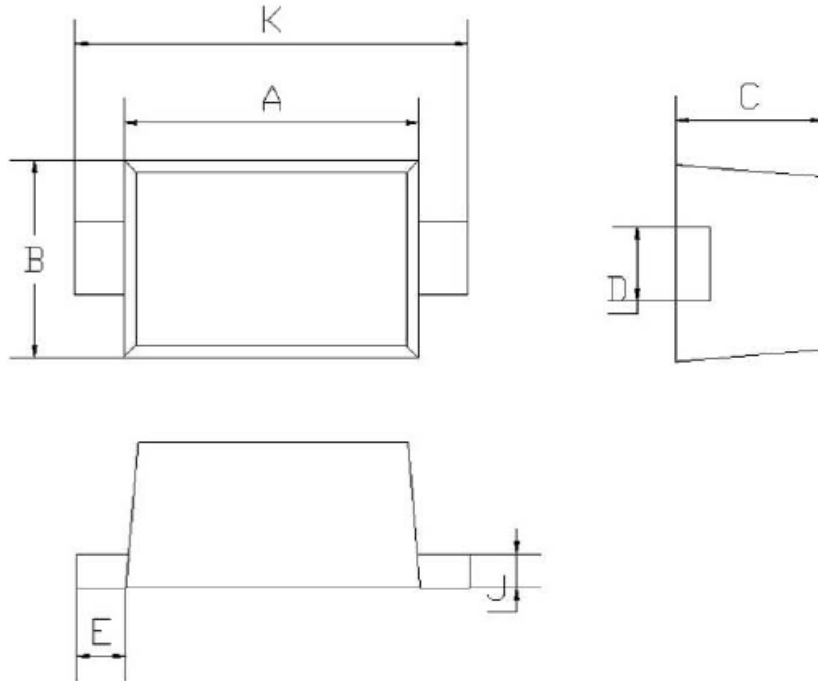
Figure 2. Typ. Junction Capacitance vs. Reverse Voltage





**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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