

## FEATURES

- Low Forward Voltage Drop
- Extremely Small SOD-323 Package
- Surface Device Type Mounting
- RoHS Compliant
- Green EMC
- Band Indicates Cathode
- Marking: JU4
- Tape and reel: 3,000Pcs/ 7" reel

## PACKAGE OUTLINE



## APPLICATIONS

- Low voltage rectification
- Reverse polarity protection
- Low power consumption applications

## SOD-323

## MAXIMUM RATING (T<sub>amb</sub>=25 °C)

Symbol	Parameter	Value	Units
V <sub>RRM</sub>	Maximum repetitive reverse voltage	40	V
V <sub>R</sub>	Maximum DC blocking reverse voltage	40	V
I <sub>F(AV)</sub>	Average Forward Current	2	A
I <sub>FSM</sub>	Peak Forward Surge Current (At 8.3ms single half sine-wave)	20	A
T <sub>J</sub>	Operating Junction Temperature	-50 to +125	°C
T <sub>STG</sub>	Storage Temperature Range	-50 to +150	°C

These ratings are limiting values above which the serviceability of the diode may be impaired.

## ELECTRICAL CHARACTERISTICS (T<sub>amb</sub>=25 °C)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Breakdown Voltage at I <sub>R</sub> =0.1mA	V <sub>BR</sub>	40			V
Reverse Leakage Current at V <sub>R</sub> =40V	I <sub>R</sub>			80	μA
Forward Voltage at I <sub>F</sub> =1A	V <sub>F</sub>		0.37	0.42	V
Forward Voltage at I <sub>F</sub> =2A	V <sub>F</sub>			0.50	V
Junction Capacitance V <sub>R</sub> = 0V, f = 1MHz	C <sub>J</sub>		340	400	pF

## RATING AND CHARACTERISTICS CURVES (RB10U40WS)

Fig 1 Typical Forward Current Derating Curve

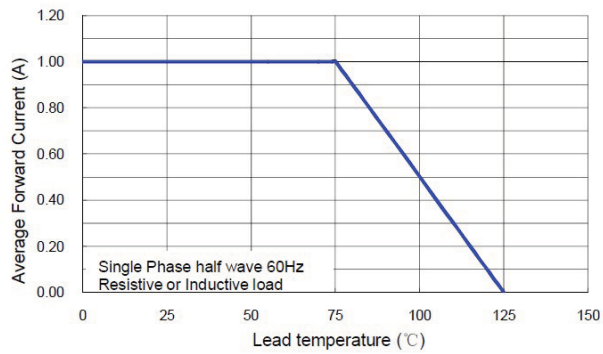


Fig 2 Total Capacitance vs. Reverse Voltage

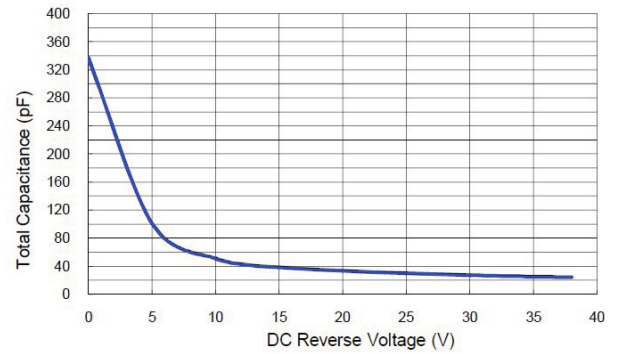


Fig 3 Typical Instantaneous Forward Characteristics

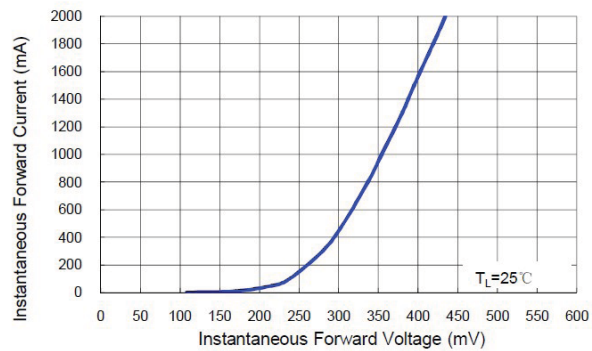
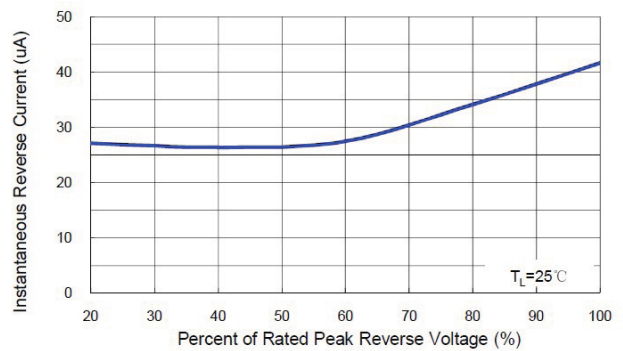
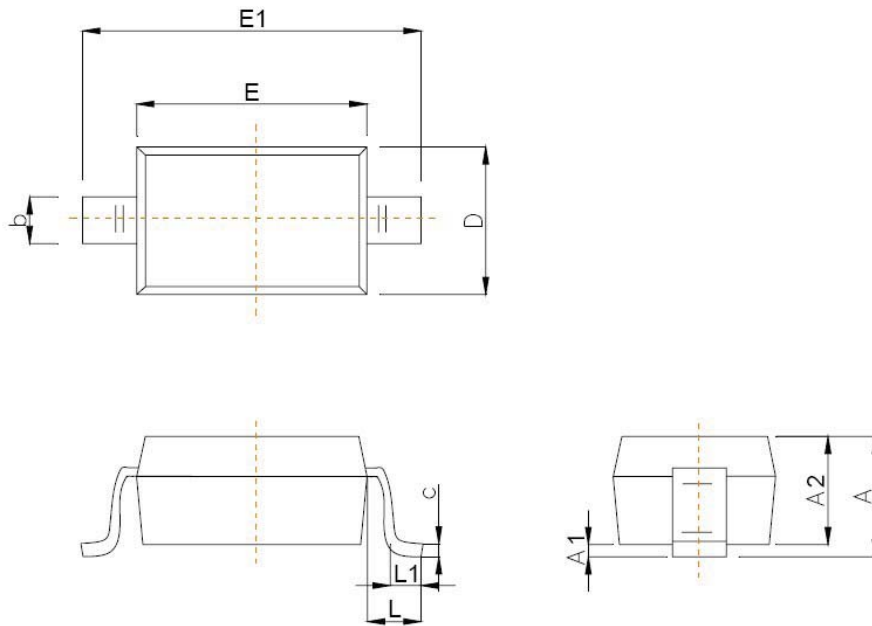


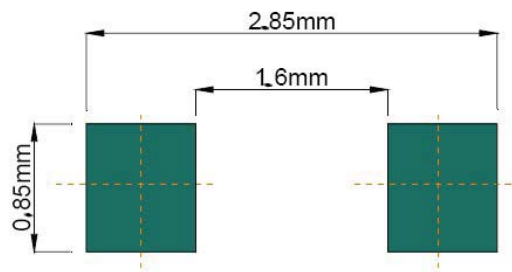
Fig 4 Typical Reverse Characteristics



## SOD-323 Package Outline Dimensions



Symbol	Dimensions In Millimeters	
	Min	Max
A		1.00
A1	0.000	0.100
A2	0.800	0.900
b	0.250	0.350
c	0.080	0.150
D	1.200	1.400
E	1.600	1.800
E1	2.500	2.700
e	1.800	2.040
L	0.475 REF	
L1	0.250	0.400
θ	0°	8°



**Recommended Pad outline**

## DISCLAIMER NOTICE

Rectron Inc reserves the right to make changes without notice to any product specification herein, to make corrections, modifications, enhancements or other changes. Rectron Inc or anyone on its behalf assumes no responsibility or liability for any errors or inaccuracies. Data sheet specifications and its information contained are intended to provide a product description only. "Typical" parameters which may be included on RECTRON data sheets and/ or specifications can and do vary in different applications and actual performance may vary over time. Rectron Inc does not assume any liability arising out of the application or use of any product or circuit.

Rectron products are not designed, intended or authorized for use in medical, life-saving implant or other applications intended for life-sustaining or other related applications where a failure or malfunction of component or circuitry may directly or indirectly cause injury or threaten a life without expressed written approval of Rectron Inc. Customers using or selling Rectron components for use in such applications do so at their own risk and shall agree to fully indemnify Rectron Inc and its subsidiaries harmless against all claims, damages and expenditures.