

250mW SOD-323 Fast Switching Diode
Features

- 4.0nS; Fast Switching Device (TRR <4.0 nS)
- 250mW; Power Dissipation of 250mW
- High Stability and High Reliability
- Low reverse leakage
- P/N suffix V means AEC-Q101 qualified, eg:BAS316WSV
- P/N suffix V means Halogen-free

SOD-323

Mechanical Data

- SOD-323 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Mounting Position: Any

MARKING: A6
Maximum Ratings & Thermal Characteristics (Ratings at 25°C ambient temperature unless otherwise specified.)

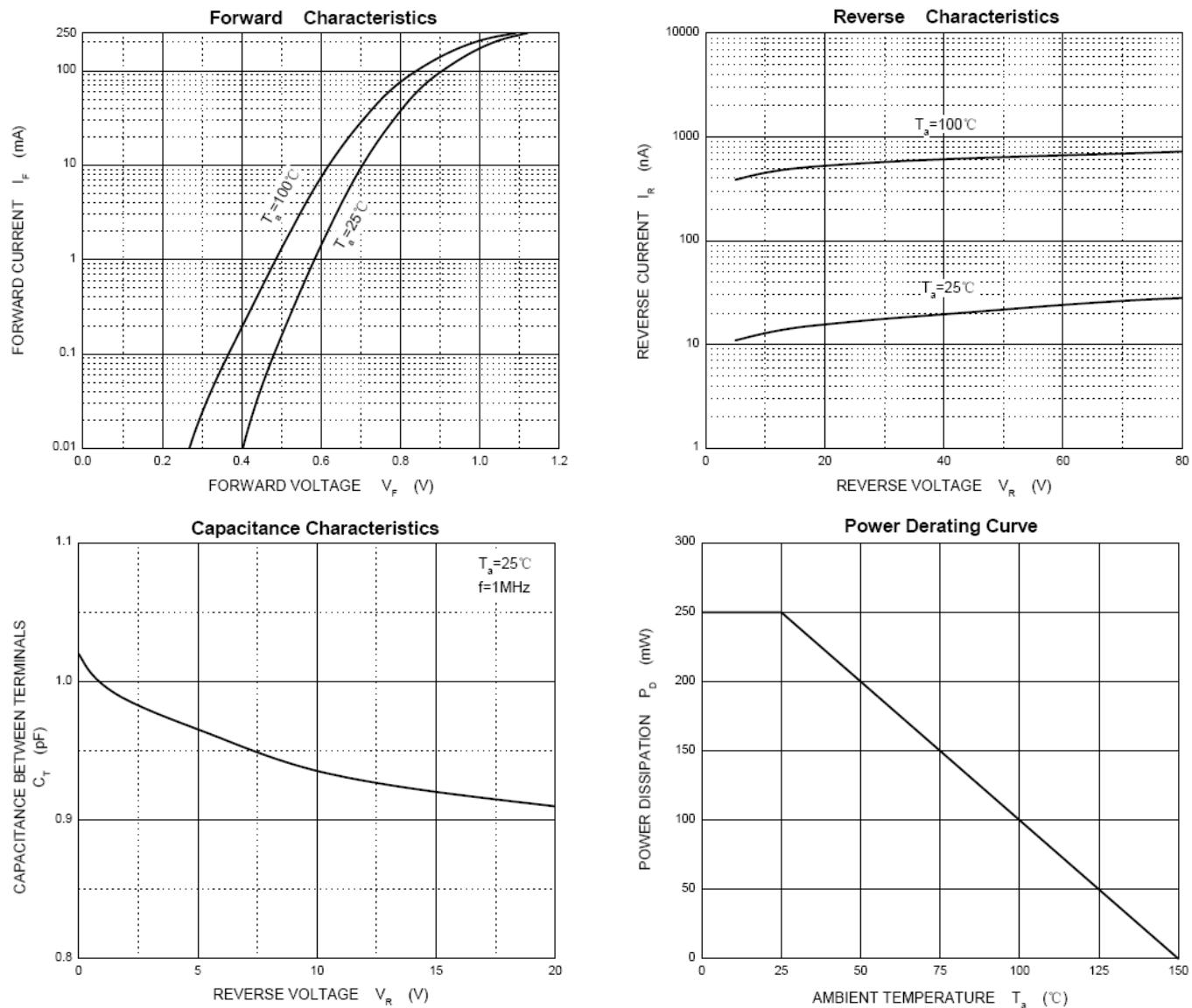
Parameters	Symbol	Value	Unit
Reverse Voltage	V_R	75	V
Peak Repetitive Reverse Voltage	V_{RRM}	85	V
Power Dissipation	P_d	250	mW
Operating junction temperature	T_j	150	°C
Storage temperature range	T_s	-55-+150	°C
Thermal Resistance from Junction to Ambient	R_{JA}	500	°C/W
Average Rectified Current	I_o	250	mA
Peak Forward Surge Current @ $t_p=1\mu s$; $TA=25^\circ C$	I_{FSM}	4.0	A

Valid provided that electrodes are kept at ambient temperature.

Electrical Characteristics (Ratings at 25°C ambient temperature unless otherwise specified).

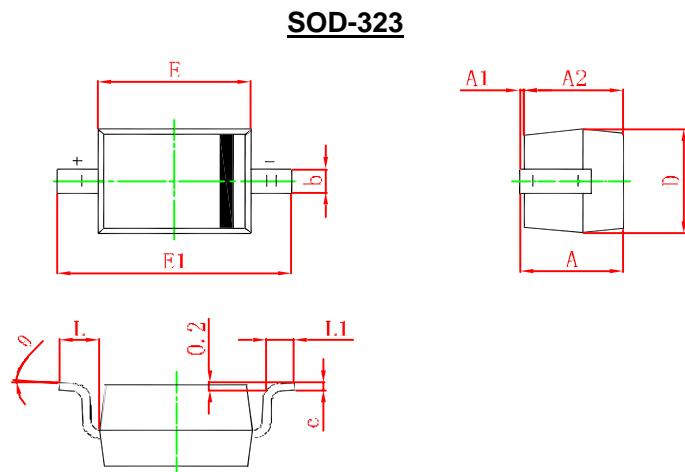
Symbols	Parameter	Test Condition	Limits		Unit
			Min	Max	
$V(BR)$	Reverse Voltage	$IR=100\mu A$	100		V
I_R	Reverse Leakage Current	$VR=25V$	---	30	nA
		$VR=75$	---	1	uA
V_F	Forward Voltage	$IF=1.0mA$	---	0.715	V
		$IF=10mA$	---	0.855	
		$IF=50mA$	---	1.00	
		$IF=150mA$	---	1.25	
TRR	Reverse Recovery Time	$IF= IR=10mA$	---	4	nS
		$RL=100\mu$			
		$IRR=0.1 \times IR$			
CT	Capacitance	$VR=0V, f=1MHz$	---	1.5	pF

RATING AND CHARACTERISTICS CURVES (BAS316WSV)



SOD-323 PACKAGE OUTLINE

Plastic surface mounted package



Symbol	Min.(mm)	Max.(mm)
A		1.000
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
L	0.475REF	
L1	0.250	0.400
θ	0°	8°

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