

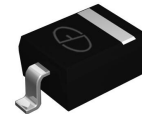
SOD- 323 Plastic-Encapsulate Schottky Barrier Diode

Features

- High Current Capability
- Low Forward Voltage Drop

Mechanical Data

- SOD-323 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Epoxy UL: 94V-0
- Mounting Position: Any



Marking: SOD-323
BAT42WS: S7
BAT43WS: S8

Maximum Ratings & Thermal Characteristics (T_A=25°C unless otherwise noted)

Parameters	Symbol	Value	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	30	V
Maximum RMS voltage	V _{RMS}	21	V
Maximum DC blocking voltage	V _{DC}	30	V
Non-repetitive Peak Forward Current	I _{FM}	200	mA
Repetitive Peak Forward Current @t<1.0s	I _{FRM}	500	mA
Peak forward surge current 8.3 ms single half sine-wave	I _{FSM}	4.0	A
Power Dissipation	P _D	200	mW
Typical thermal resistance	R _{θJA}	500	°C/W
Storage temperature range	T _{STG}	-55-+150	°C
Junction temperature	T _J	125	°C

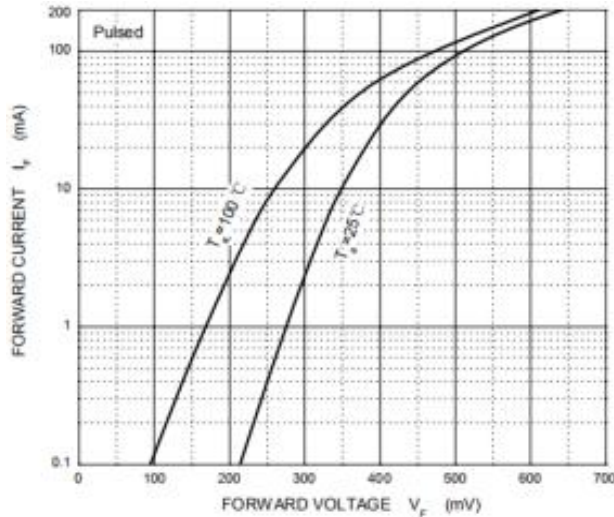
Electrical Characteristics (T_A=25°C unless otherwise noted)

Parameter	Symbols	Test Condition	Limits			Unit
			Min	Typ	Max	
Maximum reverse breakdown voltage	V _R	I _R =10uA	30			V
Maximum reverse current	I _R	V _R =25V			0.5	uA
Maximum forward voltage	BAT42WS BAT43WS	V _F	0.26		1.0	V
	BAT42WS				0.40	
	BAT42WS				0.65	
	BAT43WS				0.33	
	BAT43WS				0.45	
Type junction capacitance	C _j	V _R =1.0V, f=1MHZ			10	pF
Reverse recovery time	T _{RR}	I _F =I _R =10mA I _{rr} =0.1xI _R , R _L =100 Ω			5	nS

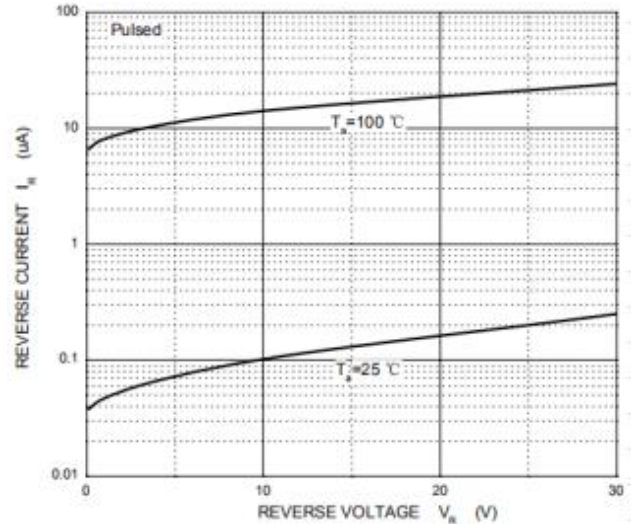
Ratings and Characteristics Curves

($T_A = 25^\circ\text{C}$ unless otherwise noted)

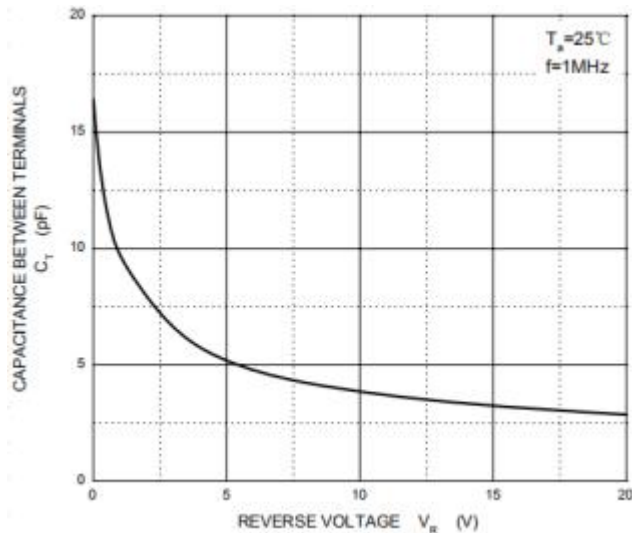
Forward Characteristics



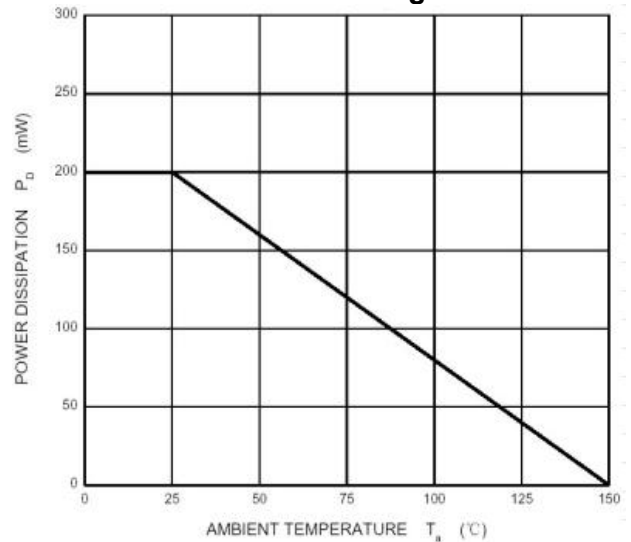
Reverse Characteristics



Capacitance Characteristics

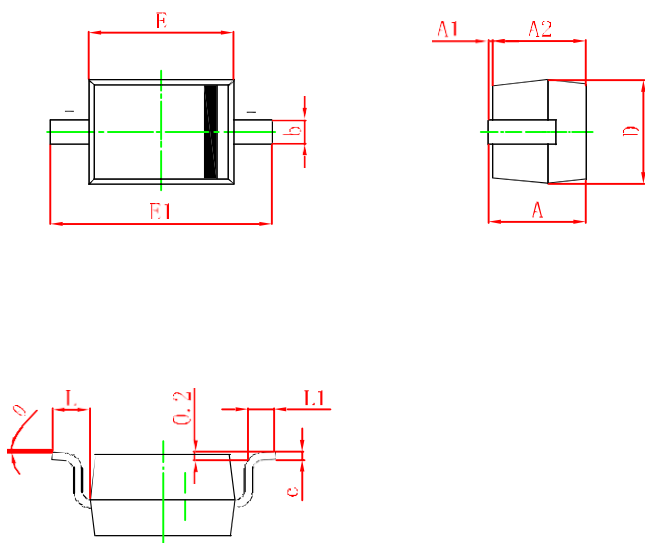


Power Derating Curve



Package Outline Dimensions

millimeters



Symbol	Min	Max
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°

Revision History

Document Version	Date of release	Description of changes
Rev.A	2014.09.23	First issue

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