

Surface Mount Schottky Barrier Diode

 Lead(Pb)-Free

Features:

- * Low Turn-on Voltage
- * Fast Switching
- * Ultra-Small Surface Mount Package

Mechanical Data:

- * Case: SOD-323, Plastic
- * Case Material-UL Flammability Rating Classification 94V-0
- * Leads: Solderable per MIL-STD-202, Method 208
- * Polarity: Cathode Band
- * Weight: 0.004 grams(approx.)

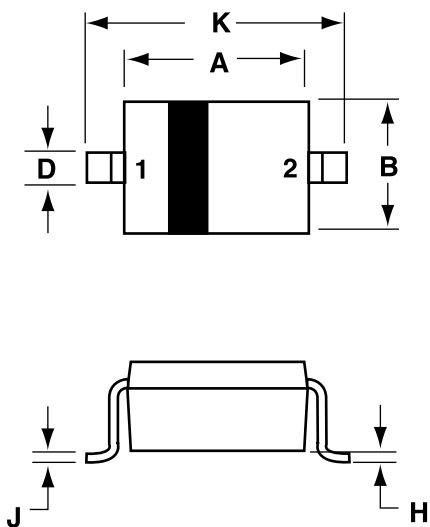
SCHOTTKY DIODE
200m AMPERES
40VOLTS



SOD-323

SOD-323 Outline Demensions

Unit:mm



Dim	MILLMETERS	
	Min	Max
A	1.60	1.80
B	1.15	1.35
C	0.80	1.00
D	0.25	0.40
E	0.15 REF	
H	0.00	0.10
J	0.089	0.177
K	2.30	2.70

PIN 1.CATHODE
2.ANODE

Maximum Ratings (T_A=25°C Unless otherwise noted)


Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	40	V
Forward Continuous Current (Note 1)	I _{FM}	200	mA
Power Dissipation (Note 1)	P _d	350	mW
Forward Surge Current (Note 1) @ t < 1.0s	I _{FSM}	600	mA
Thermal Resistance, Junction to Ambient Air (Note 1)	R _{θJA}	357	°C/W
Operating Junction Temperature Range	T _j	-55 to +125	°C
Storage Temperature Range	T _{STG}	-65 to +150	°C

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

Characteristic	Symbol	Min	Typ	Max	Unit
Reverse Breakdown Voltage I _R = 10μA	V _{(BR)R}	40	—	—	V
Forward Voltage t _p < 300μs, I _F = 1.0mA t _p < 300μs, I _F = 40mA	V _F	—	—	380 1000	mV
Reverse Leakage Current t _p < 300μs, V _R = 30V	I _R	—	20	200	nA
Junction Capacitance V _R = 0V, f = 1.0MHz	C _j	—	4.0	5.0	pF
Reverse Recovery Time I _F = I _R = 10mA to I _R = 1.0mA, R _L = 100Ω	t _{rr}	—	—	5.0	ns

Notes: 1. Valid Provided that terminals are kept at ambient temperature.

Device Marking

Item	Marking	Equivalent Circuit diagram
BAS40WS	43	

Typical Characteristics

