

Surface Mount Schottky Barrier Diode

 Lead(Pb)-Free

Features:

- * High Current Rectifier Schottky Diode with Low VF drop
- * Low Voltage, Low inductance
- * For Power Supply
- * For detection and step-up-conversion

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.)

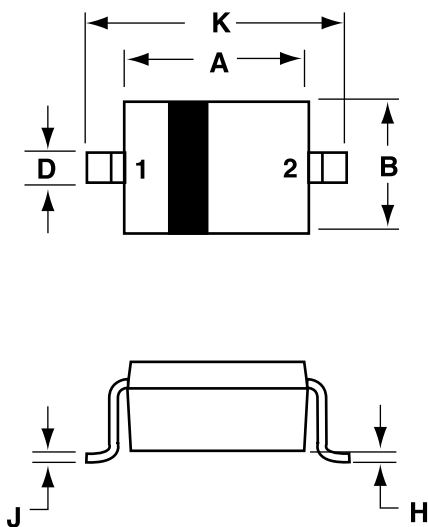
SCHOTTKY DIODE
3.0AMPERES
10VOLTS



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
Non-Repetitive Peak reverse Voltage	V _{RRM}	10	V
DC reverse voltage	V _R	10	V
Forward Current	I _F	3.0	A
Forward Surge Current @tp=10ms	I _{FSM}	5.0	A
Power Dissipation T _a =25°C	P _D	250	mW
Junction temperature Range	T _J	150	°C
Storage temperature Range	T _{STG}	-55 to +150	°C


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

Characteristic	Symbol	Min	Max	Unit
Forward Voltage I _F =10mA I _F =100mA I _F =500mA I _F =1000mA	V _F	- - - -	0.30 0.38 0.50 0.60	V
Reverse Current V _R =5.0V V _R =8.0V	I _R	- -	15 25	μA
Total Capacitance V _R =5.0V, f=1.0MHz	C _T	-	30	PF

Note:

1. Parts Mounted on FR-4 PC Board with recommended pad layout.

Device Marking

Item	Marking	Equivalent Circuit diagram
BAT60B	W5	

Electrical Characteristic curves(Ta=25°C)

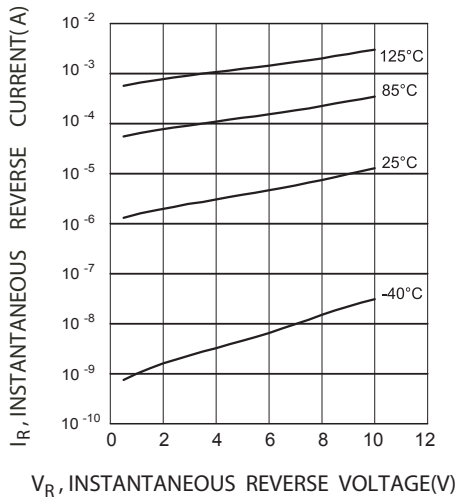


FIG. 1 Typical Reverse Characteristics

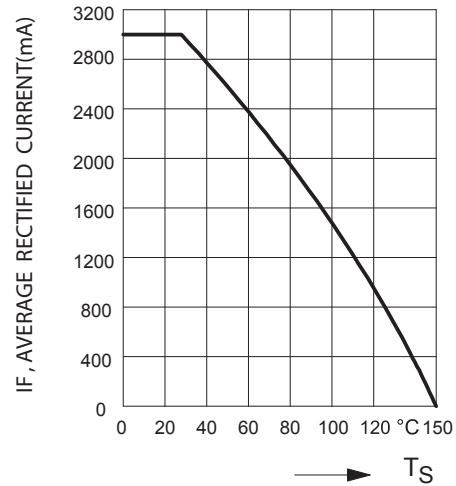


FIG. 2 Forward Current Derating Curve

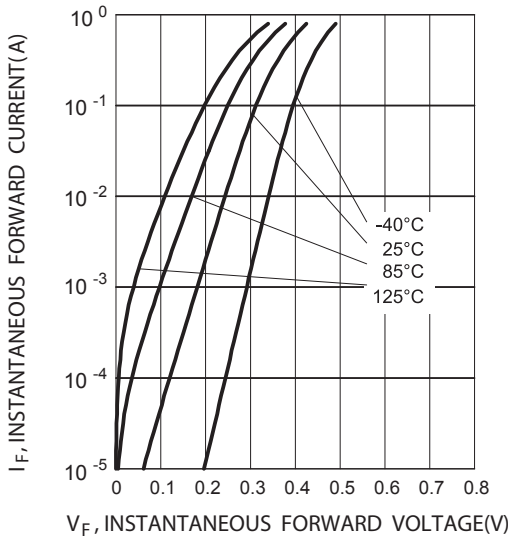


FIG. 3 Typical Forward Characteristics

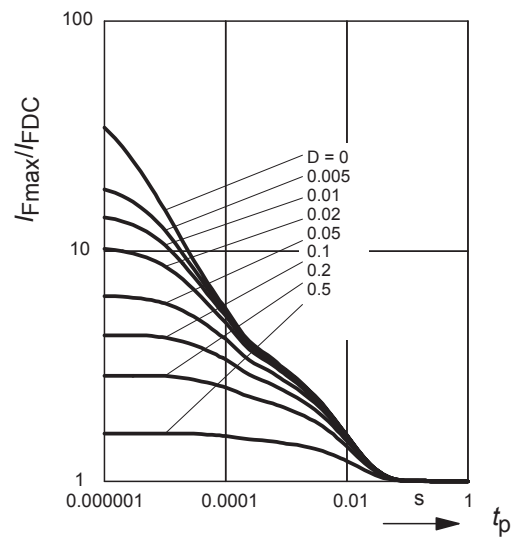


FIG. 4 Permissible Pulse Load $I_{Fmax}/I_{FDC}=f(tp)$

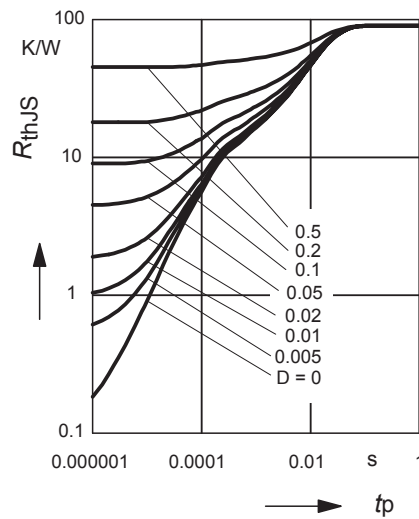


FIG. 5 Permissible Pulse Load $R_{thJS}=f(tp)$