WEITRON

BAT46W

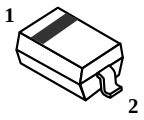
Surface Mount Schottky Barrier Diode

Lead(Pb)-Free

SCHOTTKY DIODE
100 VOLTS
75m AMPERES

Features:

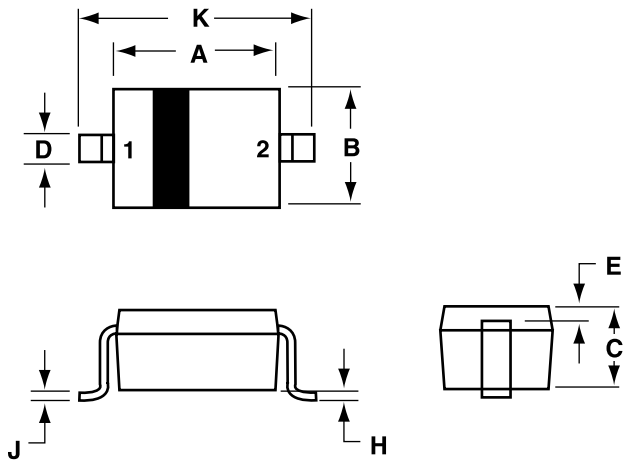
* High Breakdown Voltage.
* Low Turn-on Voltage.
* Gurad Ring Construction for Transient Protection.



SOD-123

SOD-123 Outline Dimensions

Unit:mm



SOD-123		
Dim	**Min**	**Max**
A	2.55	2.85
B	1.40	1.80
C	0.95	1.35
D	0.50	0.70
E	0.30 REF	
H	-	0.10
J	-	0.15
K	3.55	3.85

PIN 1. CATHODE
2. ANODE

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

Characteristic	Symbol	Value	Unit
DC Reverse Voltage	V_R	100	V
Average Rectifier Forward Current	I_O	75	mA
Forward Continuous Current[1]	I_F	150	mA
Repetitive Peak Forward Current[1] tp < 1.0s, Duty Cycle < 50%	I_{FRM}	350	mA
Forward Surge Forward Current[1] tp = 10ms	I_{FSM}	750	mA
Power Dissipation	P_D	200	mW
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	500	°C/W
Operation Junction Temperature Range	T_J	125	˚C
Storage Temperature Range	T_{stg}	-55 to +125	˚C

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

Characteristic	Symbol	Min	Typ	Max	Unit
Forward Voltage t_p<300S, duty Cycle<2%					
I_F=0.1mA	V_F	-	-	0.25	V
I_F=10mA		-	-	0.45	
I_F=250mA		-	-	1.0	
Reverse Leakage t_p<300S, duty Cycle<2%					
V_R=1.5V	I_R	-	-	0.5	µA
V_R=1.5V, T_j=60°C		-	-	5.0	
V_R=1.0V		-	-	0.8	
V_R=1.0V, T_j=60°C		-	-	7.5	
V_R=50V		-	-	2.0	
V_R=50V, T_j=60°C		-	-	15	
V_R=75V		-	-	5.0	
V_R=75V, T_j=60°C		-	-	20	
Total Capacitance					
V_R=0V, f=1.0MHz	C_J	-	10	-	pF
V_R=1.0V, f=1.0MHz		-	6.0	-	

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

Electrical Characteristic curves(T_A=25°C)

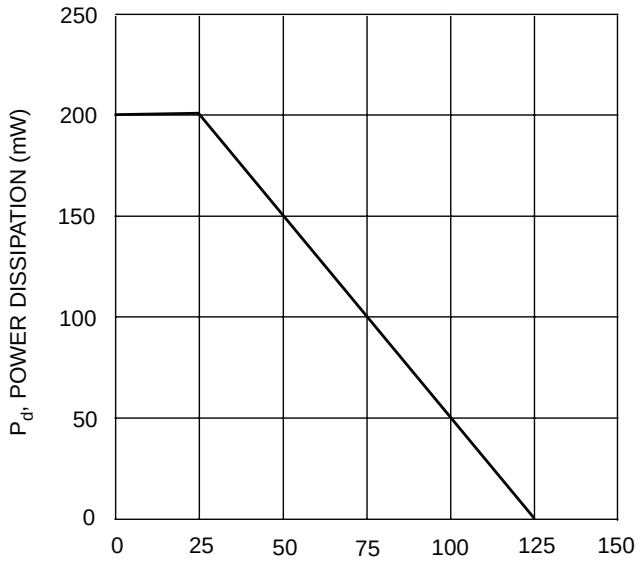


Fig.1 Power Derating Curve