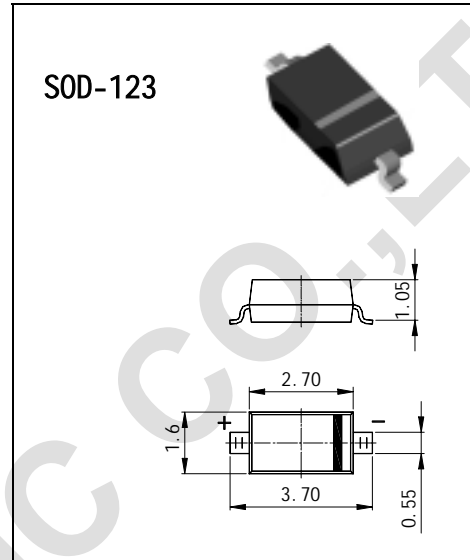


Features

- High Breakdown Voltage
- Low Turn-on Voltage
- Guard Ring Construction for Transient Protection



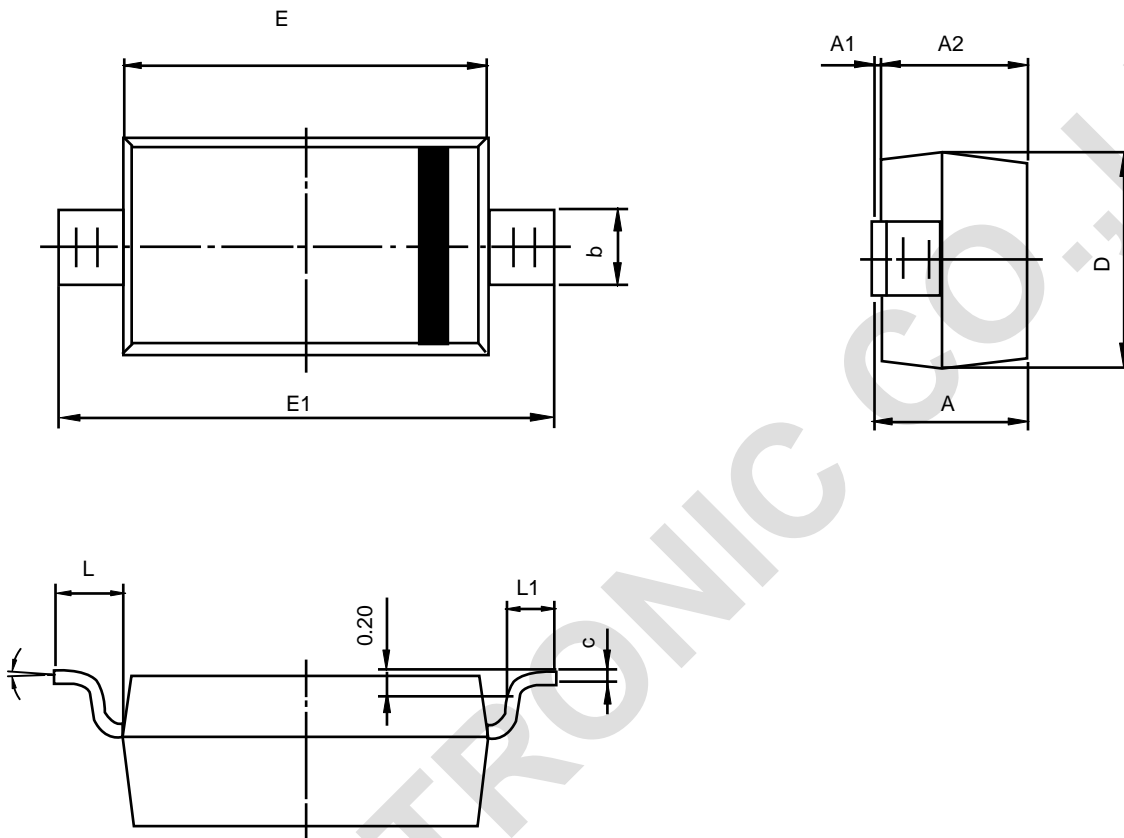
Maximum Ratings @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	BAT46W	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	100	V
Average Rectified Forward Current	I _O	75	mA
Forward Continuous Current (Note 1)	I _F	150	mA
Repetitive Peak Forward Current (Note 1) @ t _p < 1.0s, Duty Cycle < 50%	I _{FRM}	350	mA
Forward Surge Forward Current (Note 1) @ t _p = 10ms	I _{FSM}	750	mA
Power Dissipation (Note 1)	P _d	200	mW
Operating and Storage Temperature Range	T _j , T _{STG}	-55 to +125	°C

Electrical Characteristics @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Breakdown Voltage	V _{(BR)R}	100	—	—	V	I _{RS} = 100μA pulses
Forward Voltage	V _F	—	—	0.25 0.45 1.00	V	t _p < 300μs, duty cycle < 2% I _F = 0.1mA I _F = 10mA I _F = 250mA
Reverse Leakage Current	I _R	—	—	0.5 5.0 0.8 7.5 2.0 15 5.0 20	μA	t _p < 300μs, duty cycle < 2% V _R = 1.5V V _R = 1.5V, T _j = 60°C V _R = 10V V _R = 10V, T _j = 60°C V _R = 50V V _R = 50V, T _j = 60°C V _R = 75V V _R = 75V, T _j = 60°C
Junction Capacitance	C _j	—	10 6.0	—	pF	V _R = 0V, f = 1.0MHz V _R = 1.0V, f = 1.0MHz
Thermal Resistance, Junction to Ambient Air	R _{θJA}	—	—	500	K/W	Note 1

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



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.450	0.650	0.018	0.026
c	0.080	0.150	0.003	0.006
D	1.500	1.700	0.059	0.067
E	2.600	2.800	0.102	0.110
E1	3.550	3.850	0.140	0.152
L	0.500REF		0.020REF	
L1	0.250	0.450	0.010	0.018
θ	0°	8°	0°	8°