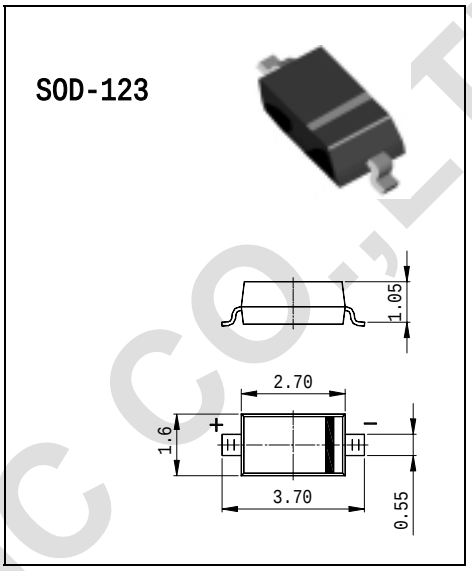
WEJ®

RoHS

BAT46W



Features

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

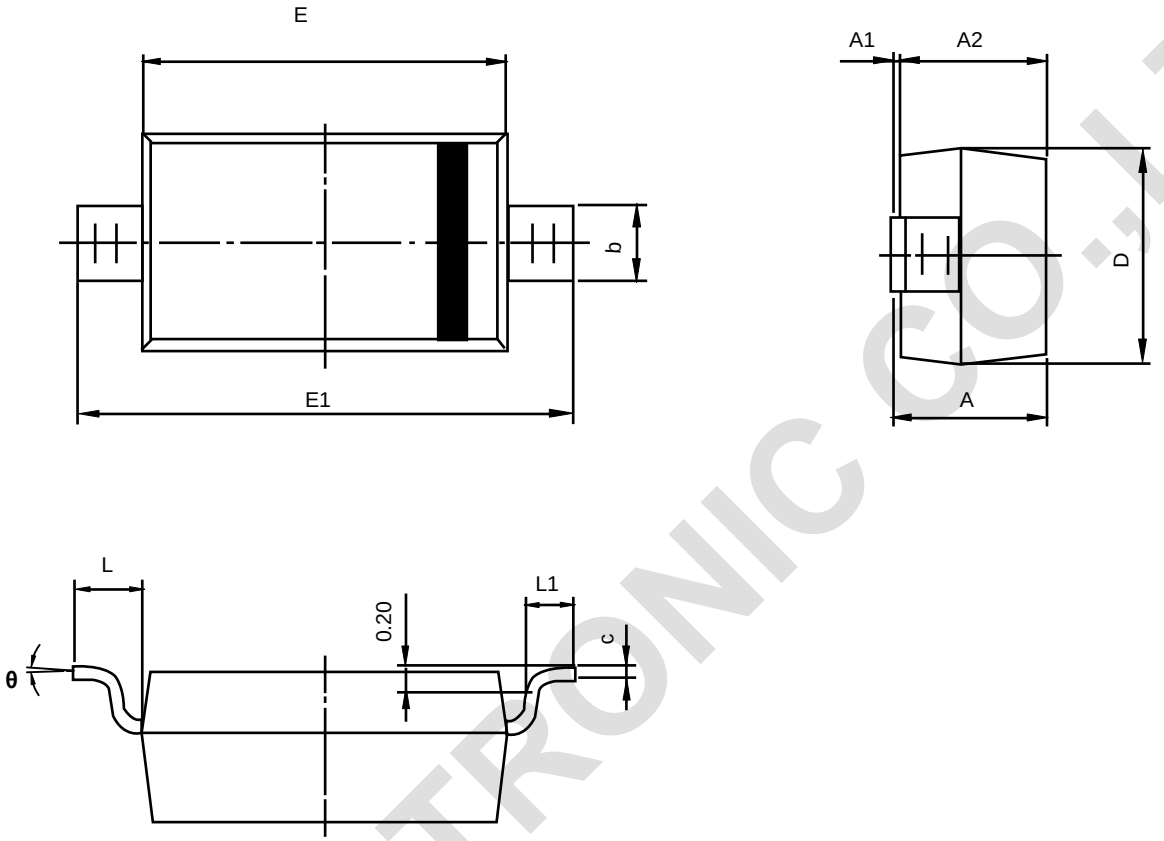
Maximum Ratings @ T_A = 25°C unless otherwise specified

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, Tj = 60°C V_R = 10V V_R = 10V, Tj = 60°C V_R = 50V V_R = 50V, Tj = 60°C V_R = 75V V_R = 75V, Tj = 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	$R_{\theta JA}$	—	—	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°