



JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

SOD-123 Plastic-Encapsulate Diode

B5817W SCHOTTKY BARRIER DIODE

FEATURES :

Power dissipation

P_D : 450 mW ($T_{amb}=25^{\circ}\text{C}$)

Collector current

I_F : 1 A

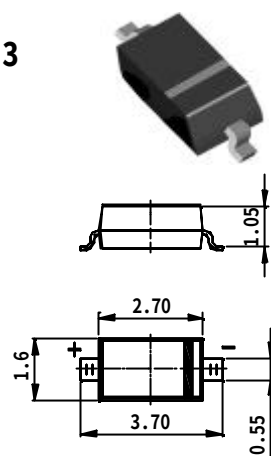
Collector-base voltage

V_R : 20 V

Operating and storage junction temperature range

T_J, T_{stg} : -55°C to $+150^{\circ}\text{C}$

SOD-123



Unit : mm

MARKING : SJ

ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)}$	$I_R=1\text{mA}$	20		V
Reverse voltage leakage current	I_R	$V_R=20\text{V}$		1	mA
Forward voltage	V_F	$I_F=1\text{A}$ $I_F=3\text{A}$		0.45 0.75	V
Diode capacitance	C_D	$V_R=4\text{V}$ $f=1\text{MHz}$		120	pF

Typical Characteristics

B5817W

Fig. 1 - Forward Current Derating Curve

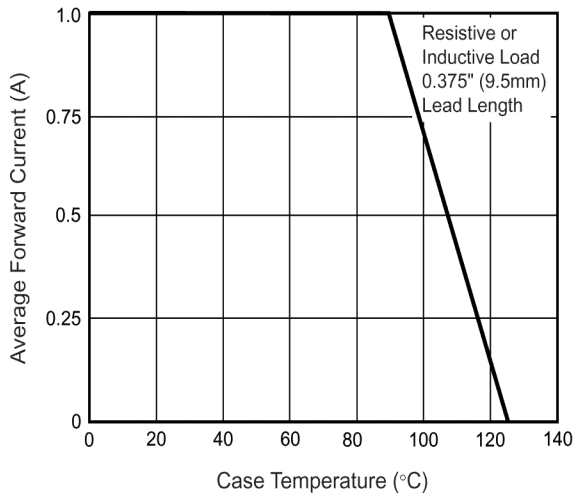


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

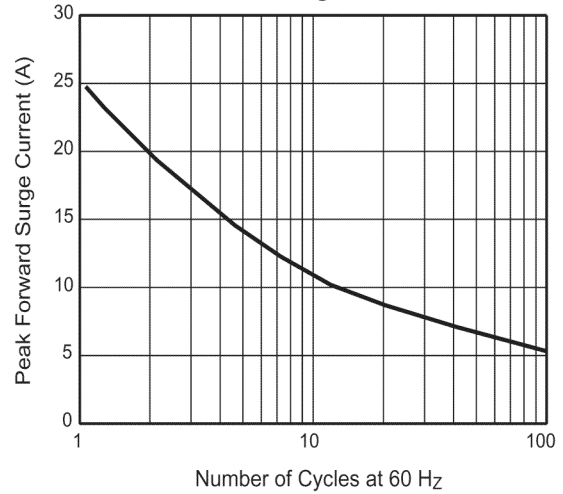


Fig. 3 - Typical Instantaneous Forward Characteristics

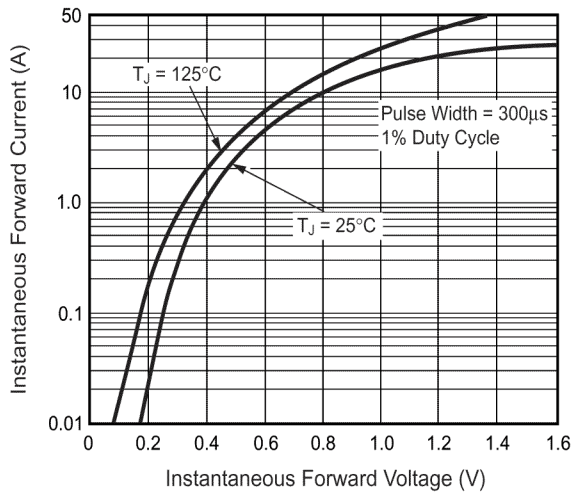


Fig. 4 - Typical Reverse Characteristics

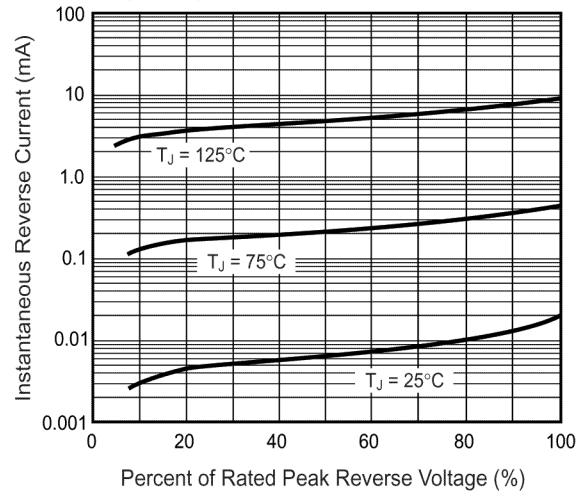


Fig. 5 - Typical Junction Capacitance

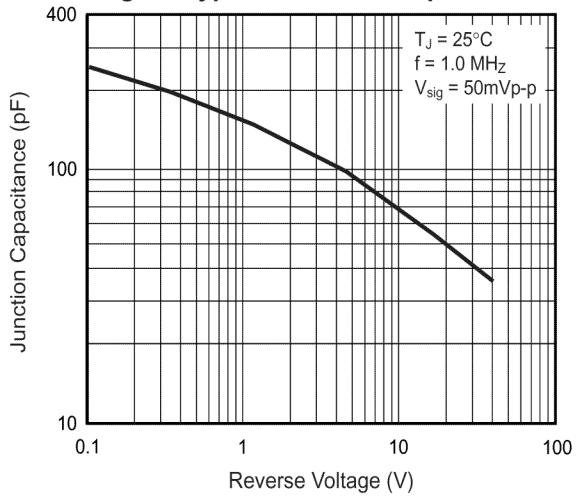
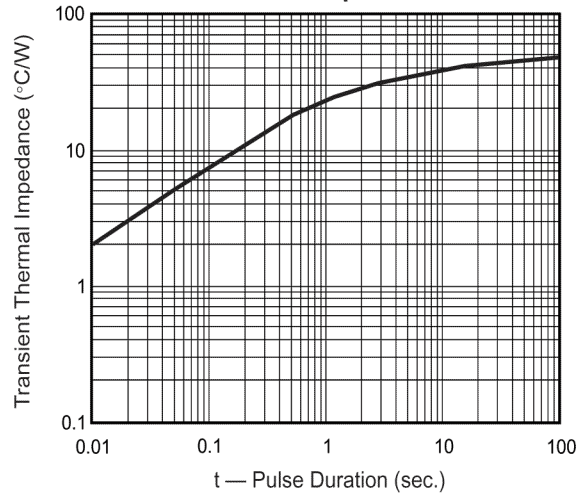
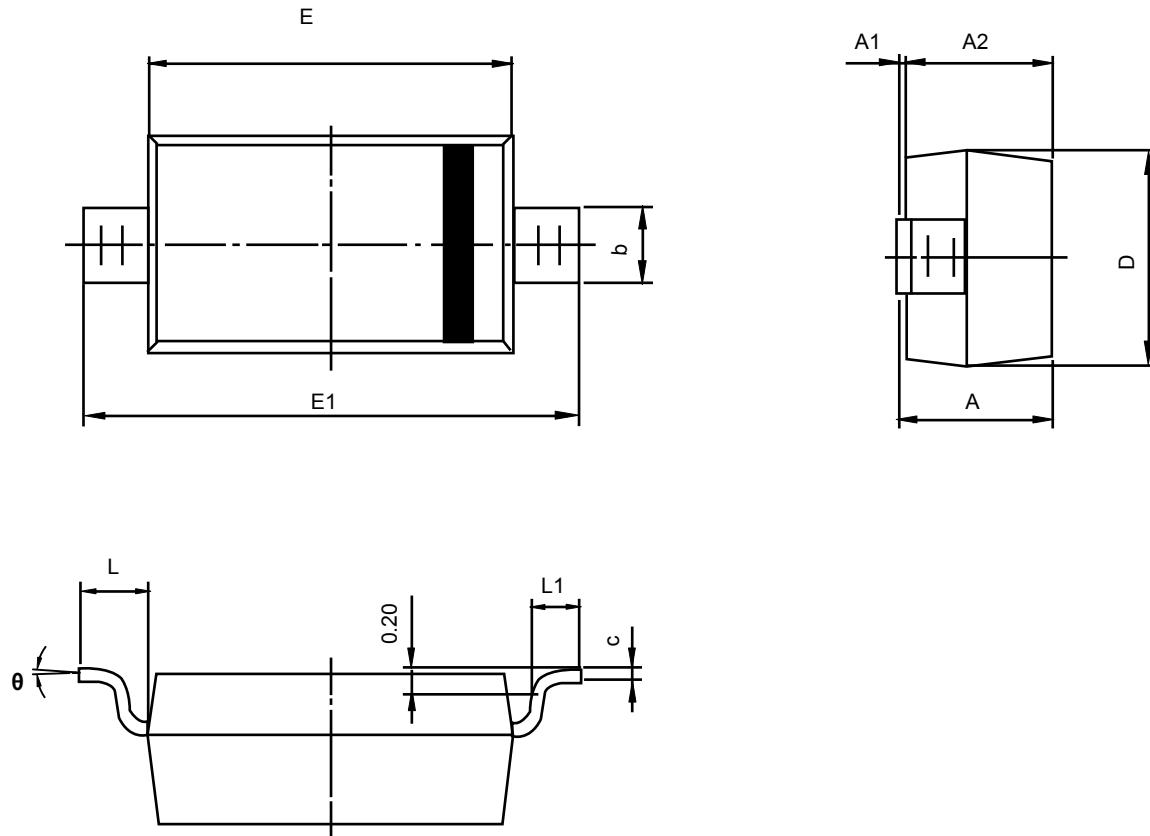


Fig. 6 - Typical Transient Thermal Impedance



SOD-123 PACKAGE OUTLINE DIMENSIONS



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°