

Features

- High current capacity, low VF
- Low power loss/high efficient

Mechanical Data

SOD-123 Small Outline Plastic Package

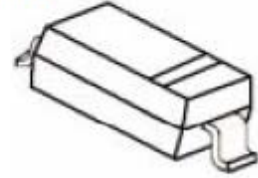
Polarity: Color band denotes cathode end

Epoxy UL: 94V-0

Mounting Position: Any

Making: SJ

SOD-123



Marking: SJ

Maximum Rating @ Ta=25 °C unless otherwise specified

Parameter	symbol	B5817W	Unit
Non-Repetitive Peak reverse voltage	V_{RSM}	24	V
Maximum repetitive peak reverse voltage	V_{RRM}	20	V
Maximum RMS voltage	V_{RMS}	14	V
Maximum DC blocking voltage	V_{DC}	20	V
Maximum average forward rectified current	I_F	1.0	A
Peak forward surge current 8.3 ms single half sine-wave	I_{FSM}	10	A
Power Dissipation	P_d	500	mW
Typical thermal resistance	$R_{\theta JA}$	250	°C/W
Storage temperature range	T_J, T_{STG}	-50-+150	°C

Electrical Characteristics

(Ratings at 25 °C ambient temperature unless otherwise specified).

Parameter	symbol	Test conditions	B5817W	Unit
Maximum forward voltage	V_F	$I_F = 1.0A$ $I_F = 3.0A$	0.450 0.750	V
Maximum reverse breakdown voltage	V_R	$I_R = 1mA$	20	V
Maximum reverse current	I_R	$V_R = 20V$	1.0	mA
Type junction capacitance	C_j	$V_R = 4.0V, f = 1MHz$	120	pF

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Fig.1 Forward Current Derating Curve

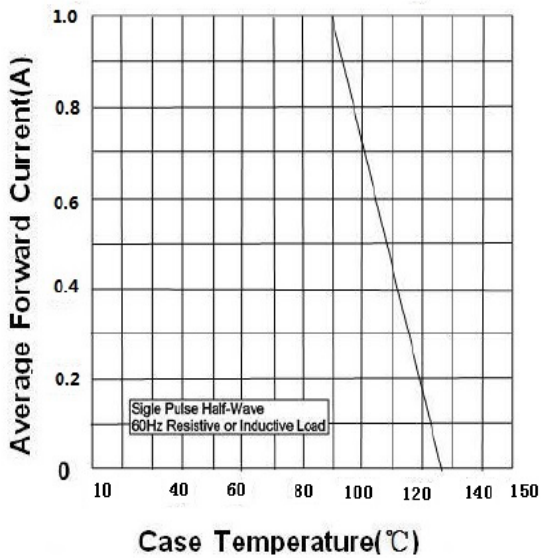


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

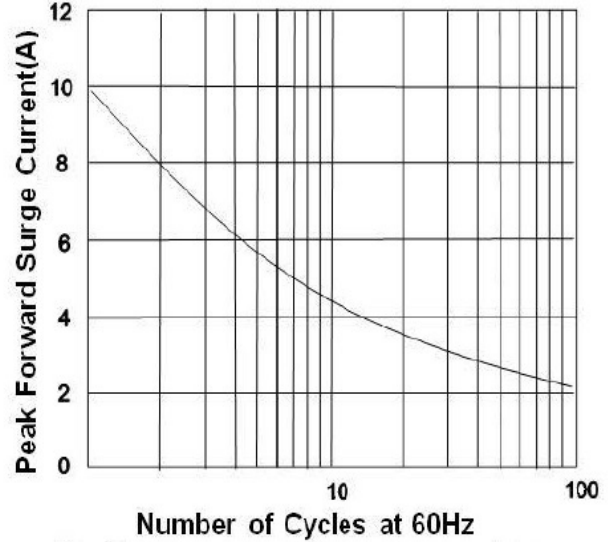


Fig. 3 - Typical Instantaneous Forward Characteristics

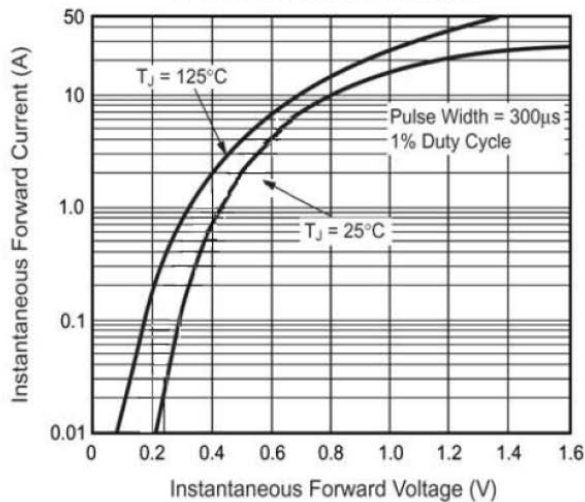
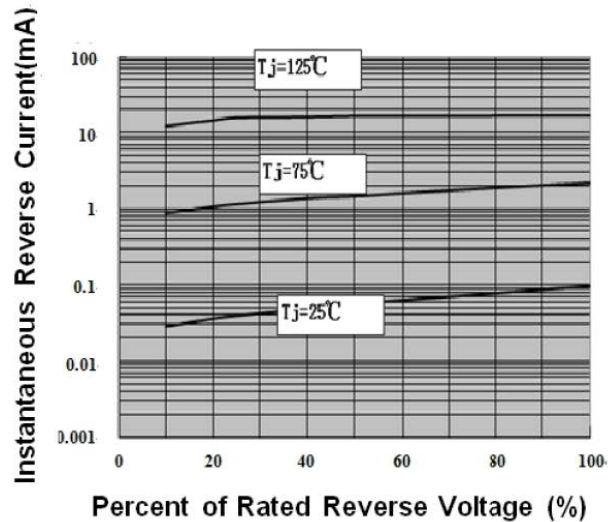
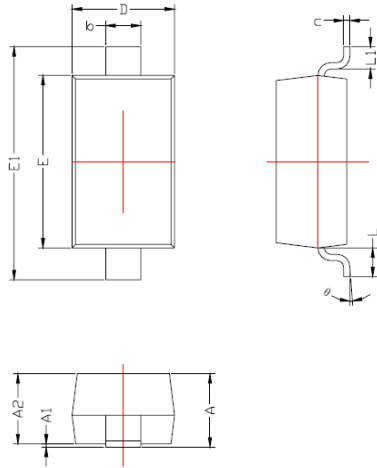


Fig.4 Typical Reverse Characteristics

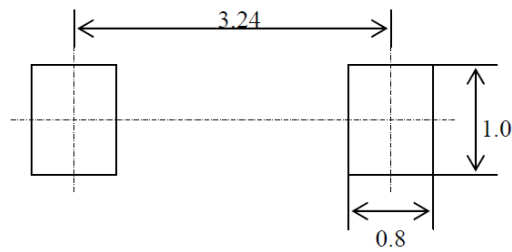


PACKAGE OUTLINE



SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	1.050	1.250
A1	0.000	0.100
A2	1.050	1.150
b	0.450	0.650
c	0.080	0.150
D	1.500	1.700
E	2.600	2.800
E1	3.550	3.850
L	0.500REF	
L1	0.250	0.450
θ	0°	8°

焊盘设计参考Precautions: PCB Design(Recommended land dimensions for SOD-123 diode. Electrode patterns for PCBs)



技术要求:
 1, 塑封体尺寸: 2.70 X 1.60
 2: 未注公差为: ±0.05
 3, 所有单位: mm