

**SOD-123**

**Marking: S4**
**Features**

High Current Capability  
 Low Forward Voltage Drop  
 Halogen free and RoHS compliant

**Mechanical Data**

SOD-123 Small Outline Plastic Package  
 Polarity: Color band denotes cathode end  
 Epoxy UL: 94V-0  
 Mounting Position: Any

**Maximum Ratings & Thermal Characteristics**

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

Parameters	Symbol	B5819W-2	Unit
Maximum repetitive peak reverse voltage	VRRM	40	V
Maximum RMS voltage	VRMS	28	V
Maximum DC blocking voltage	VDC	40	V
Maximum average forward rectified current	IFM	350	mA
Peak forward surge current 8.3 ms single half sine-wave	IFSM	2	A
Typical thermal resistance	R $\theta$ JA	250	°C/W
Power Dissipation	PD	200	mW
Storage temperature range	TSTG	-50-+150	°C

**Electrical Characteristics**

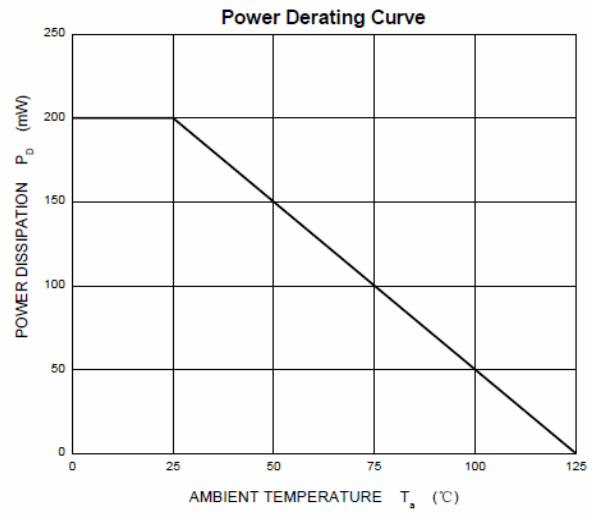
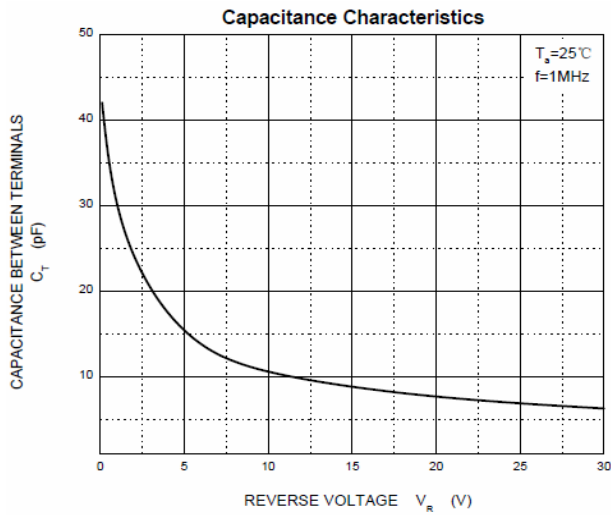
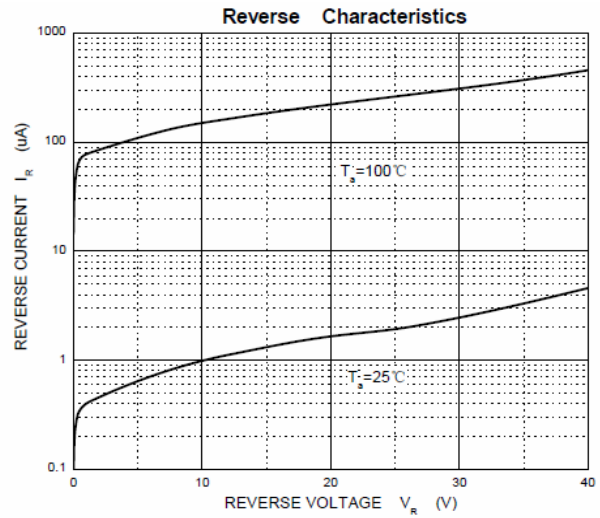
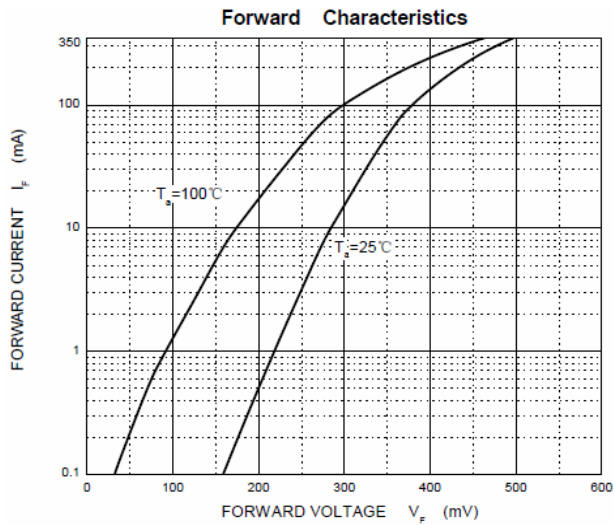
(Ratings at 25°C ambient temperature unless otherwise specified).

Parameters	Symbol	Test conditions	B5819W-2	Unit
Maximum forward voltage	V <sub>F</sub>	IF = 20mA IF = 200mA	0.370 0.600	V
Maximum reverse breakdown voltage	VR	IR=100uA	40	V
Maximum reverse current	IR	VR=30V	5.0	uA
Type junction capacitance	C <sub>j</sub>	VR =0V, f = 1MHz	50	pF
Reverse recovery time	T <sub>rr</sub>	IF=IR=200mA, I <sub>rr</sub> =0.1xIR,RL=100Ω	10	ns

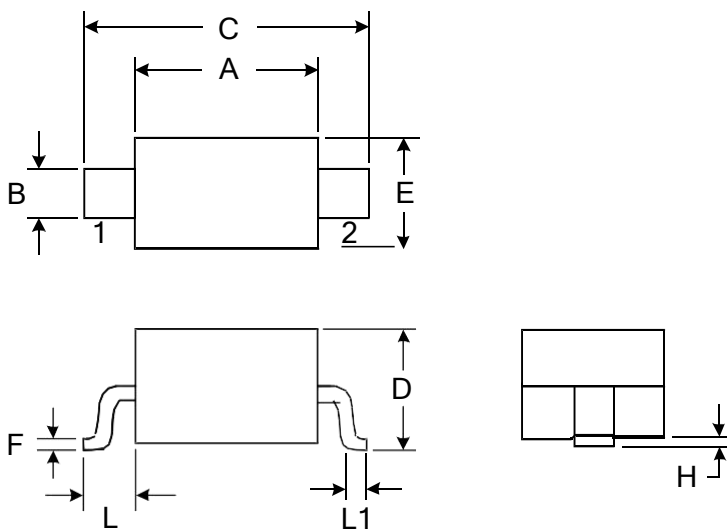
**Summary of Packing Options**

Package	Packing Description	Packing Quantity	Industry Standard
SOD-123	Tape/Reel,7" reel	3000	EIA-481-1

## Ratings and Characteristic Curves



## Package Outline Dimensions: SOD-123



DIMENSIONS				
SYMBOL	MILLIMETER		INCHES	
	MIN	MAX	MIN	MAX
A	2.600	2.800	0.102	0.110
B	0.450	0.650	0.018	0.026
C	3.550	3.850	0.139	0.152
D	1.050	1.250	0.041	0.049
E	1.500	1.700	0.059	0.067
F	0.080	0.150	0.003	0.006
L	0.500 REF		0.020REF	
L1	0.250	0.450	0.010	0.018
H	0.000	0.100	0.000	0.004