



Features

- High Current Capability
- Low Forward Voltage Drop

Mechanical Data

- Flat Lead SOD-123 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Mounting Position: Any

Marking: 1N5817W: SJ

1N5818W: SK

1N5819W: SL

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	0.190	0.003	0.008
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	0.500 REF		0.020 REF	
L1	0.250	0.450	0.010	0.018
e	0°	8°	0°	8°

Maximum Ratings & Thermal Characteristics (Ratings at 25 ambient temperature unless otherwise specified.)

Parameters	Symbol	1N5817W	1N5818W	1N5819W	Unit
Maximum repetitive peak reverse voltage	VRRM	20	30	40	V
Maximum RMS voltage	VRMS	14	21	28	V
Maximum DC blocking voltage	VDC	20	30	40	V
Maximum average forward rectified current	IFM	1.0			A
Peak forward surge current 8.3 ms single half sine-wave	IFSM	9			A
Typical thermal resistance	RθJA	250			/W
Power Dissipation	PD	500			mW
Storage temperature range	TSTG	-50-+150			

Electrical Characteristics (Ratings at 25 ambient temperature unless otherwise specified).

Parameters	Symbol	Test conditions	1N5817W	1N5818W	1N5819W	Unit
Maximum forward voltage	VF	IF = 1.0A	0.450	0.550	0.600	V
		IF = 3.0A	0.750	0.875	0.900	
Maximum reverse breakdown voltage	VR	IR=1mA	20	30	40	V
Maximum reverse current	IR	VR=20V 1N5817W VR=30V 1N5818W VR=40V 1N5819W	1.0			mA
Type junction capacitance	Cj	VR = 4.0V, f = 1MHz	120			pF

Characteristic Curves
