

1N5817W-1N5819W SCHOTTKY BARRIER DIODE

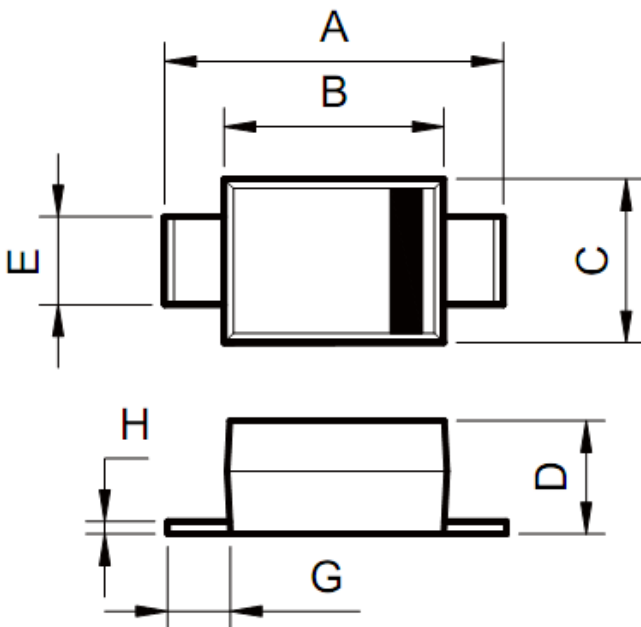
Features:

- Metal silicon junction, majority carrier conduction
- Guarding for overvoltage protection
- Low power loss, high efficiency
- High current capability
- Low forward voltage drop
- High surge capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

Mechanical Data:

- Case: SOD-123FL molded plastic body
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any

Mechanical Dimensions: In mm/Inches



Symbol	Millimeters		Inches	
	Min	Max	Min	Max
A	3.55	3.85	0.140	0.152
B	2.60	2.90	0.102	0.114
C	1.75	1.95	0.069	0.077
D	0.90	1.40	0.035	0.055
E	0.70	1.20	0.028	0.047
G	0.25	-	0.010	-

SOD-123FL

Ordering Information:

Device	Package	Shipping
1N5817W-1N5819W	SOD-123FL(Pb-Free)	3000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Parameter Marking code	Symbol	1N5817W 12A	1N5818W 13A	1N5819W 14A	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	V
Maximum DC blocking voltage	V _R				
Maximum RMS voltage	V _{R(RMS)}	14	21	28	V
Maximum average forward rectified current 0.375" (9.5mm) lead length at T _A =90°C	I _{F(AV)}	1.0			A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	25.0			A
Maximum instantaneous forward voltage at 1.0A	V _F	0.45	0.55	0.60	V
Maximum DC reverse current T _A =25°C At rated DC blocking voltage T _A =100°C	I _R	0.5 10.0			mA
Typical junction capacitance (Note 1)	C _J	110			pF
Typical thermal resistance (Note 2)	R _{ΘJA}	115			°C/W
Operating junction and storage temperature range	T _J , T _{STG}	-55 to +125			°C

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Mounted on 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas

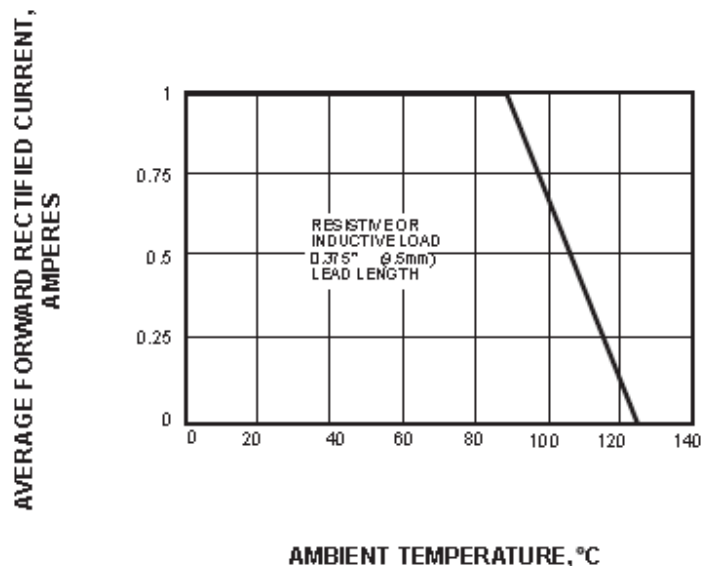


Fig.1-FORWARD CURRENT DERATING CURVE

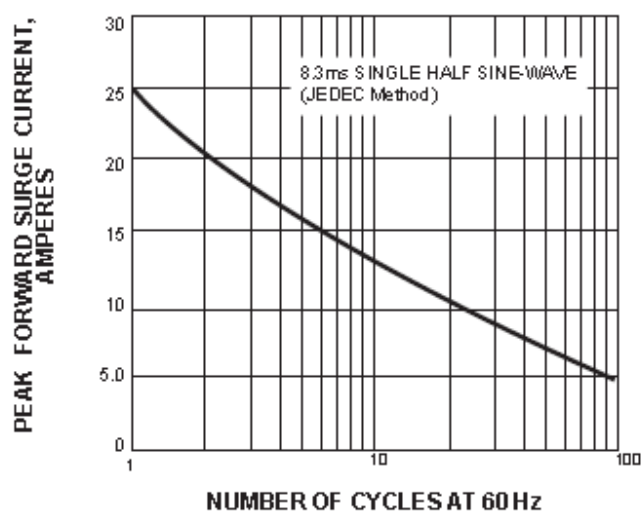


Fig.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

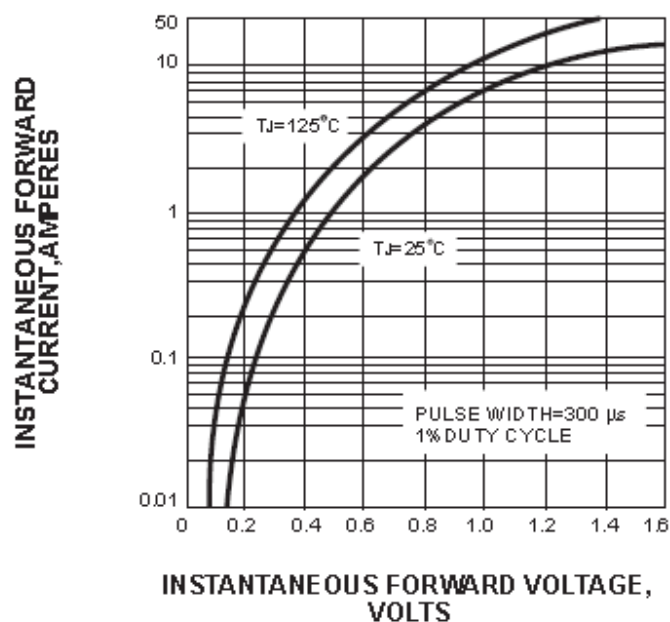


Fig.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

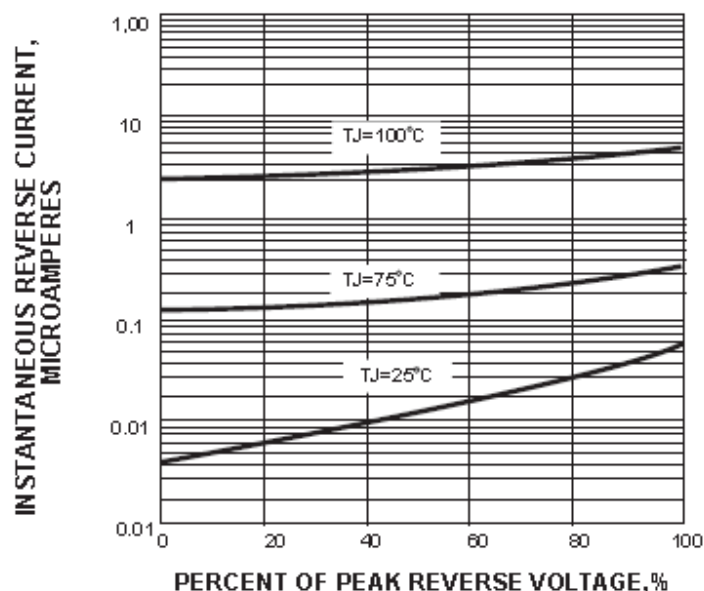


Fig.4- TYPICAL REVERSE CHARACTERISTICS

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