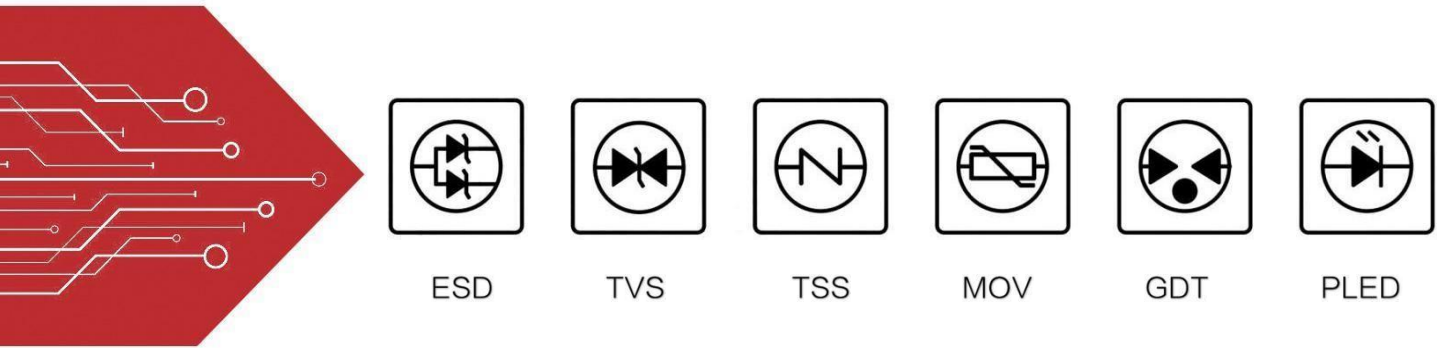
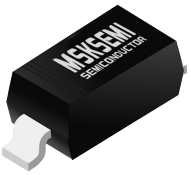
MSKSEMI
SEMICONDUCTOR



Product data sheet

www.msksemi.com



SOD-123

FEATURES

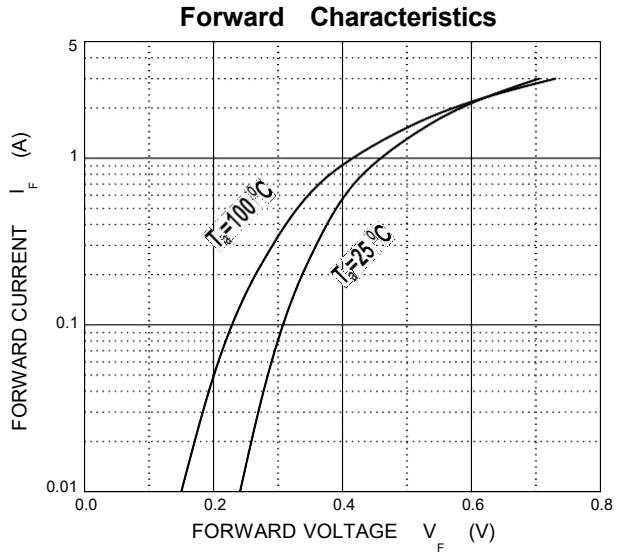
For use in low voltage, high frequency inverters
Free wheeling, and polarity protection applications.

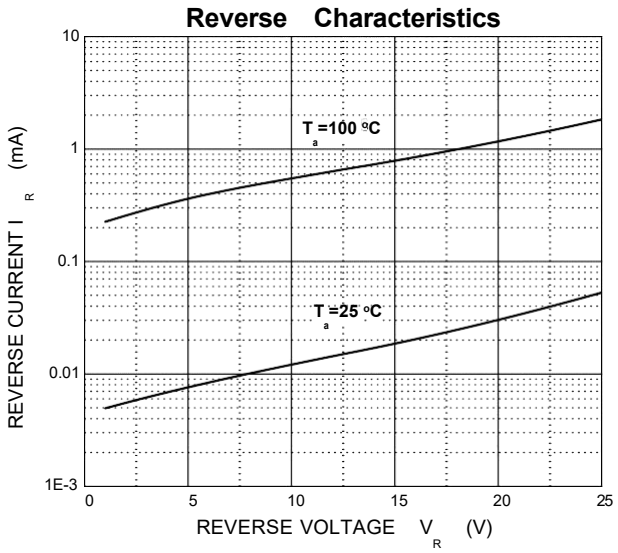
Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25℃

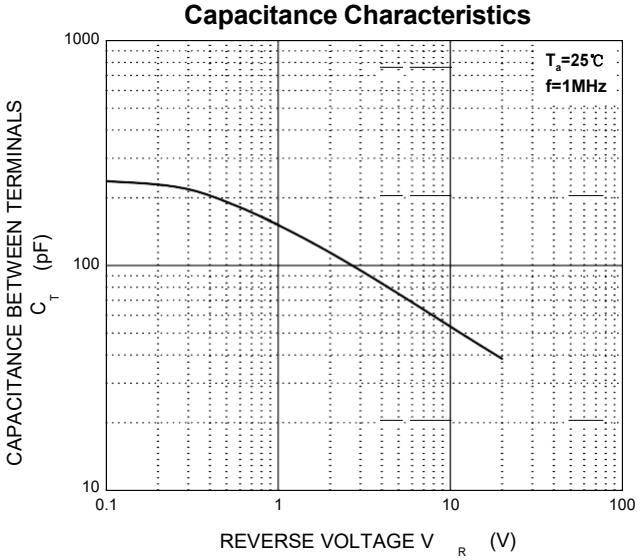
Parameter	Symbol	1N5819HW-MS	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	40	V
Peak Repetitive Peak Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	40	V
RMS Reverse Voltage	$V_{R(RMS)}$	28	V
Average Rectified Output Current	I_O	1	A
Peak Forward Surge Current @t=8.3ms	I_{FSM}	9	A
Repetitive Peak Forward Current	I_{FRM}	1.5	A
Power Dissipation	P_D	500	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	200	℃/W
Junction temperature	T_J	125	℃
Storage Temperature	T_{STG}	-55~+150	℃

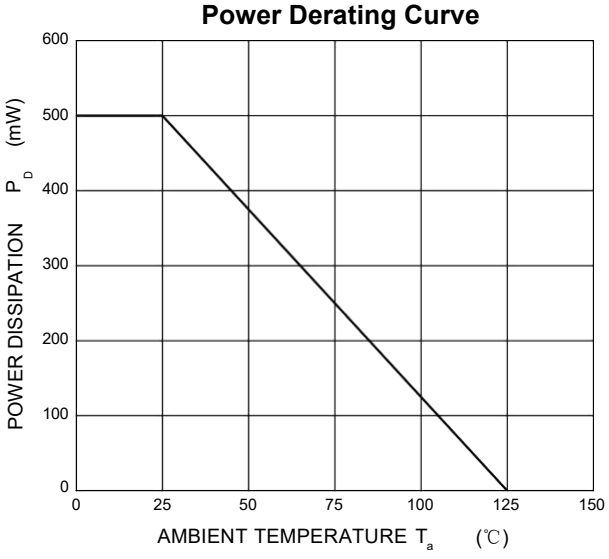
ELECTRICAL CHARACTERISTICS (Ta=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	I_R= 1mA	40		V
Reverse voltage leakage current	I_R	V_R=40V		1	mA
	V_F	I_F=1A I_F=3A		0.6 0.9	V
Diode capacitance	C_D	V_R=4V, f=1MHz		120	pF

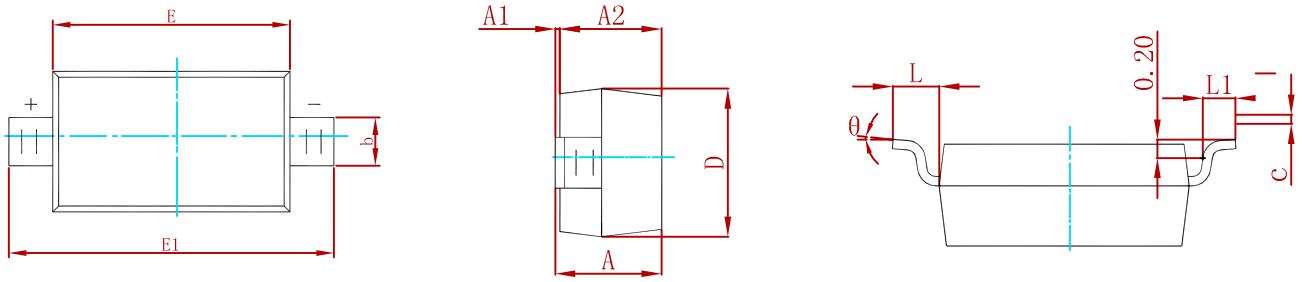






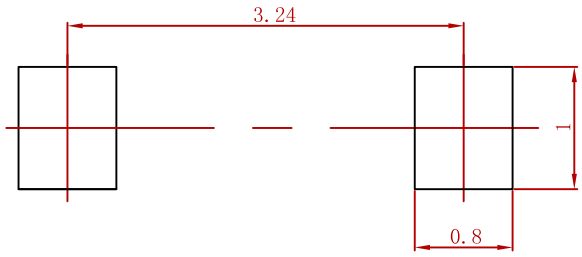


PACKAGE MECHANICAL DATA



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	0.500 REF		0.020 REF	
L1	0.250	0.450	0.010	0.018
θ	0°	8°	0°	8°

Suggested Pad Layout



Note:
1.Controlling dimension:in millimeters.
2.General tolerance:± 0.05mm.
3.The pad layout is for reference purposes only.

REEL SPECIFICATION

P/N	PKG	QTY
1N5819HW-MS	SOD-123	3000

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