

MBR230LSF

Surface Mount Schottky Barrier Rectifier

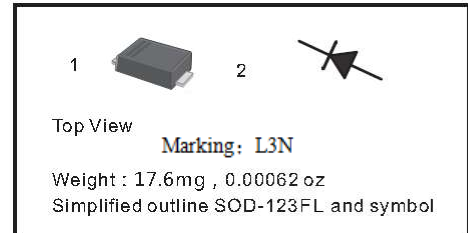
Reverse Voltage :30 V / Forward Current: 2.0A

Features

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

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Absolute Maximum Ratings and Electrical characteristics Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz resistive or inductive load, for capacitive load, derate by 20 %

Parameter	Symbols	MBR230LSF	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	30	V
Maximum RMS voltage	V_{RMS}	28	V
Maximum DC Blocking Voltage	V_{DC}	40	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	2.0	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	50	A
Max Instantaneous Forward Voltage at 2 A	V_F	0.55	V
Maximum DC Reverse Current $T_A = 25^\circ\text{C}$ at Rated DC Reverse Voltage $T_A = 100^\circ\text{C}$	I_R	0.5 10	mA
Typical Junction Capacitance ¹⁾	C_j	220	pF
Operating Junction Temperature Range	T_j	-55 ~ +125	°C
Storage Temperature Range	T_{stg}	-55 ~ +150	°C

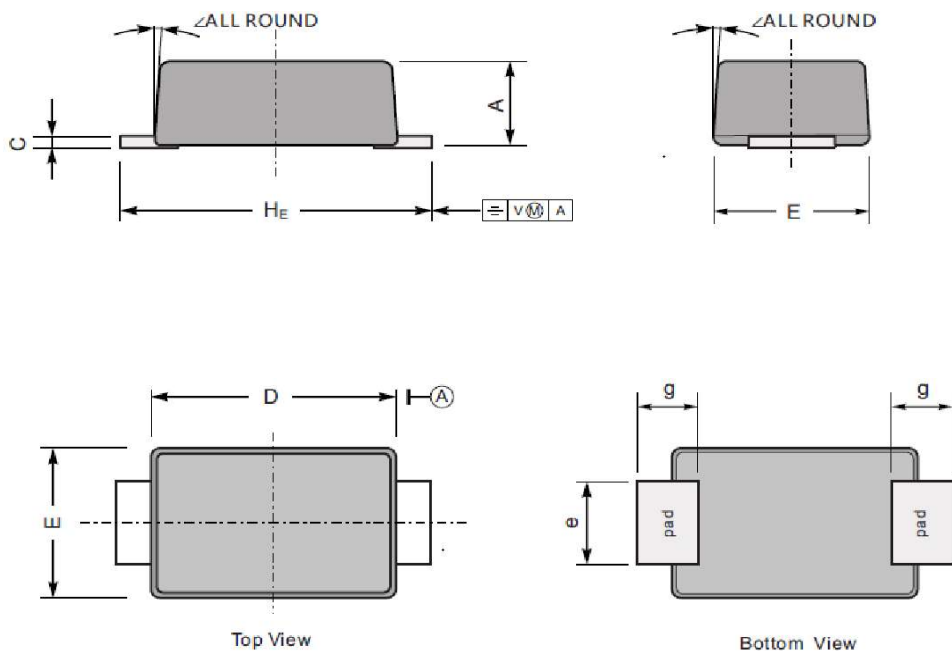
1) Measured at 1MHz and applied reverse voltage of 4 V D.C



MBR230LSF

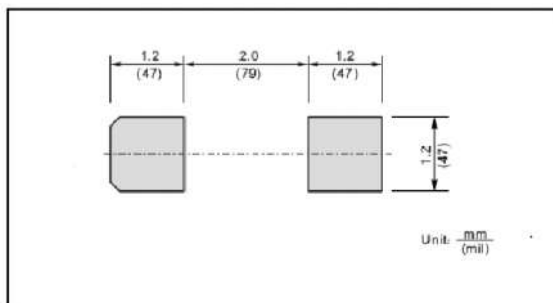
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads



UNIT		A	C	D	E	e	g	H _E	∠
mm	max	1.1	0.20	2.9	1.9	1.1	0.9	3.8	7°
	min	0.9	0.12	2.6	1.7	0.8	0.7	3.5	
mil	max	43	7.9	114	75	43	35	150	
	min	35	4.7	102	67	31	28	138	

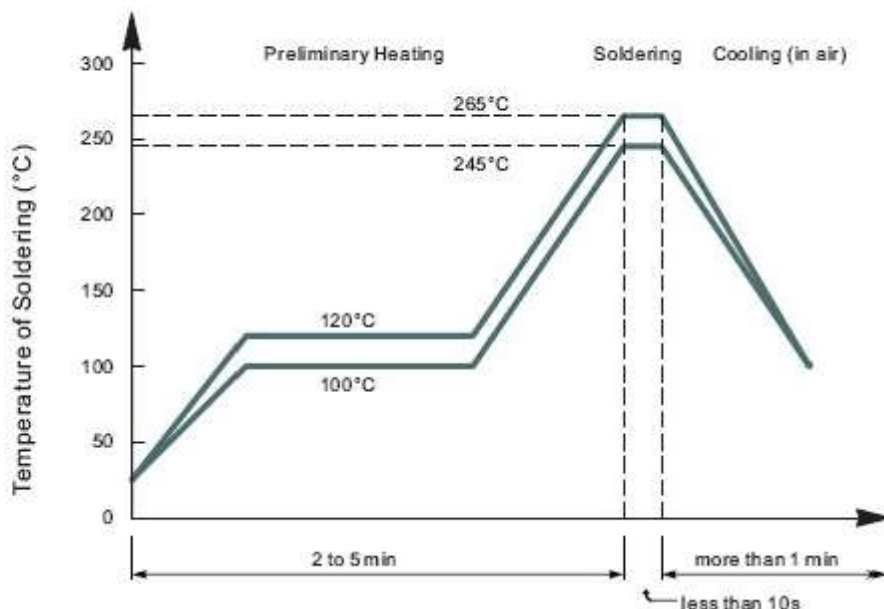
The recommended mounting pad size



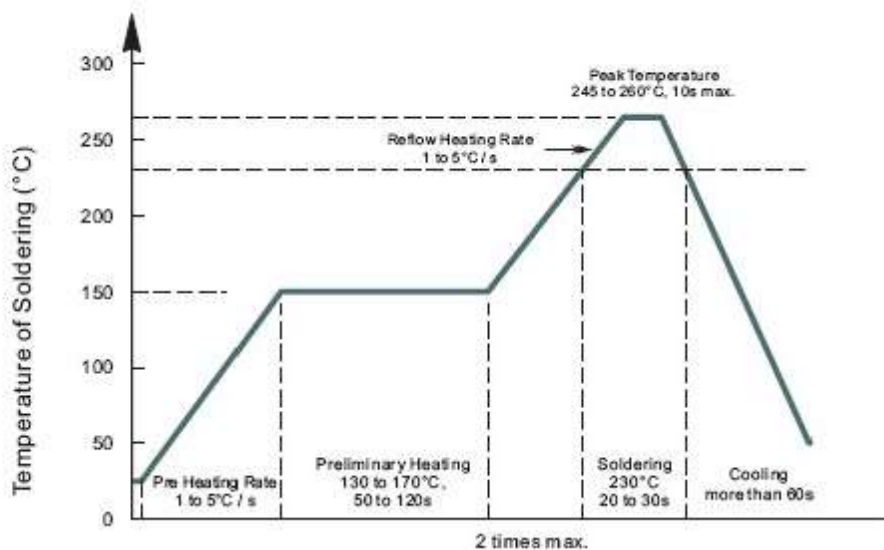


MBR230LSF

• Recommended condition of flow soldering



• Recommended condition of reflow soldering



Recommended peak temperature is over 245°C, If peak temperature is below 245°C, you may adjust the following parameters; time length of peak temperature (longer), time length of soldering (longer), thickness of solder paste (thicker)

• Condition of hand soldering: Temperature: 350°C Time: 3s max. Times: one time

• Remark: Lead free solder paste (96.5Sn/3.0Ag/0.5Cu)