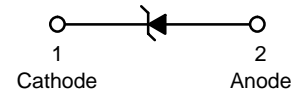
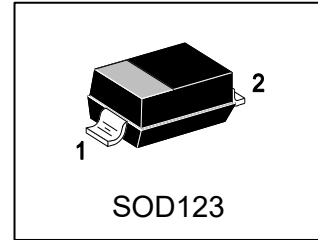


MBR130

S-MBR130

Schottky Power Rectifier



1. FEATURES

- Guardring for Stress Protection
- Low Forward Voltage
- 125°C Operating Junction Temperature
- Epoxy Meets UL 94 V-0 @ 0.125 in
- Package Designed for Optimal Automated Board Assembly
- ESD Ratings: Machine Model, C;
Human Body Model, 3
- We declare that the material of product compliance with RoHS requirements and Halogen Free.
- S-prefix for automotive and other applications requiring unique site and control change requirements; AEC-Q101 qualified and PPAP capable.

2. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
MBR130	S3	3000/Tape&Reel

3. MAXIMUM RATINGS(Ta = 25°C)

Parameter	Symbol	Limits	Unit
Maximum repetitive peak reverse voltage	VRRM	30	V
Working Peak Reverse Voltage	VRWM		
Maximum DC blocking voltage	VR		
Average Rectified Forward Current (Rated VR) TL = 65°C	IF(AV)	1	A
Non-Repetitive Peak Surge Current (Surge Applied at Rated Load Conditions, Halfwave, Single Phase, 60 Hz)	IFSM	5.5	A
Thermal resistance (Note 1)	RθJA	230	°C/W
	RθJL	108	
Operating junction and storage temperature range	TJ	-65 ~ +125	°C
Voltage Rate of Change (Rated VR)	dv/dt	1000	V/μs

1. FR-4 or FR-5 = 3.5 × 1.5 inches using a 1 inch Cu pad.



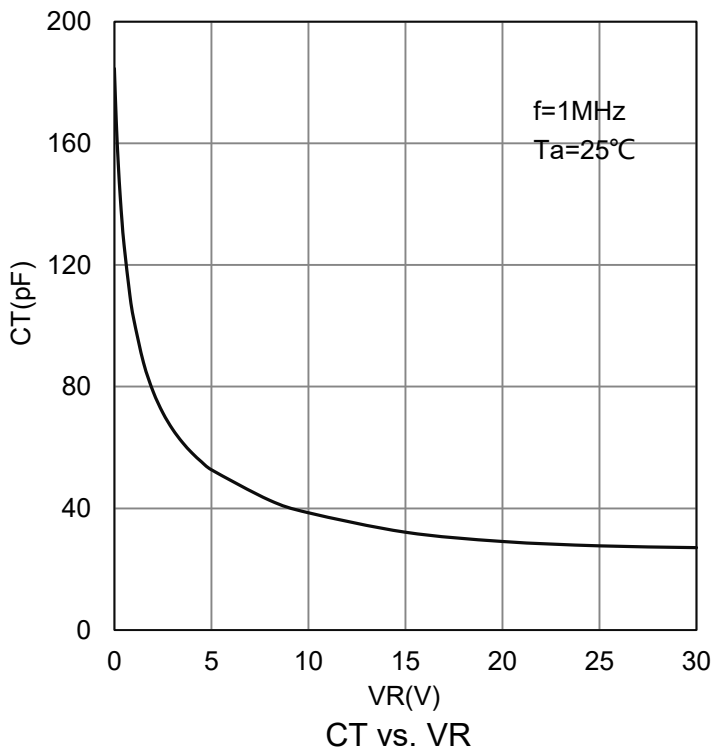
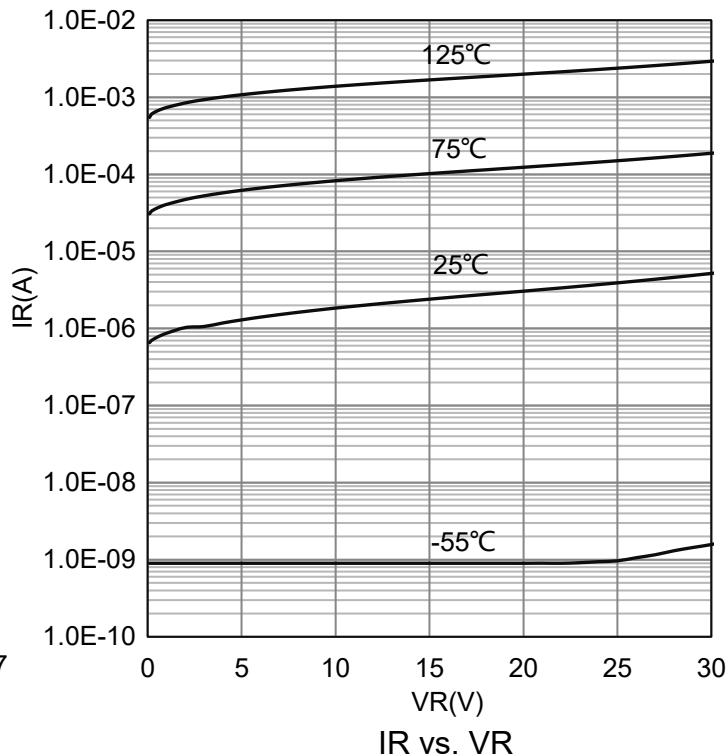
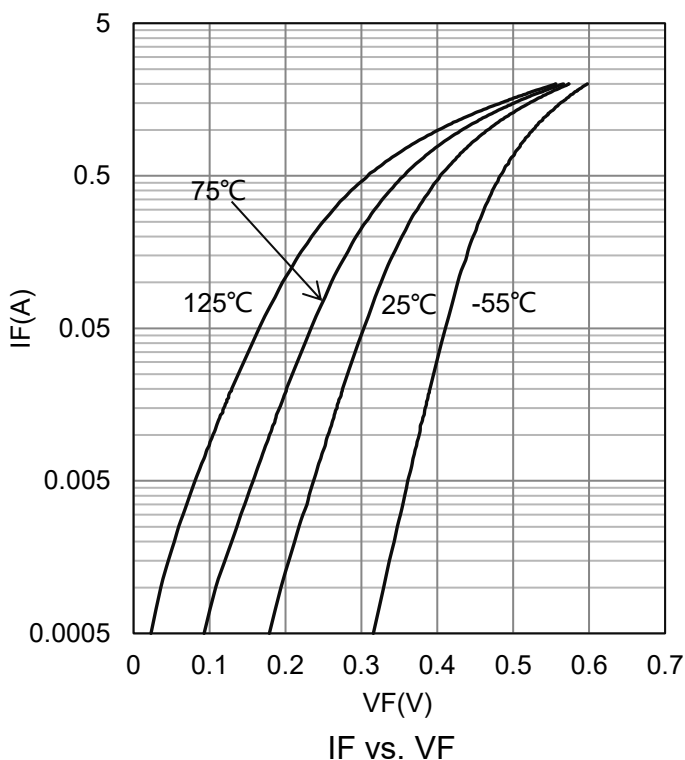
4. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Characteristic	Symbol	Min	Typ.	Max	Unit
Reverse Breakdown Voltage (IR=500μA)	VBR	30	-	-	V
Maximum instantaneous forward Voltage(Note 2) (IF = 0.1 A, TJ = 25°C) (IF = 0.7 A, TJ = 25°C) (IF = 1.0 A, TJ = 25°C)	VF	-	-	0.35 0.45 -	V
Maximum Instantaneous Reverse Current (Note 2) (VR=5V) (VR=30V)	IR	-	-	10 60	μA

2. Pulse Test: Pulse Width = 300 μs, Duty Cycle ≤ 2%.



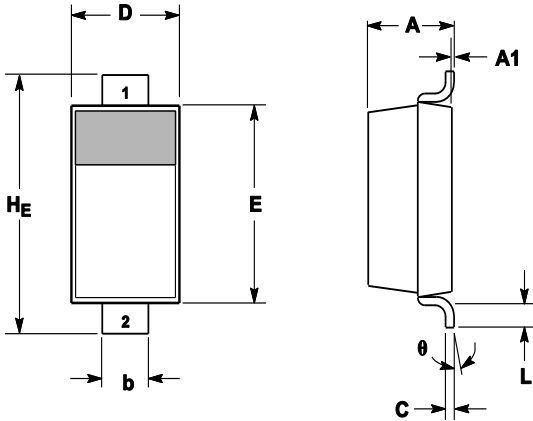
5.ELECTRICAL CHARACTERISTICS CURVES



6.OUTLINE AND DIMENSIONS

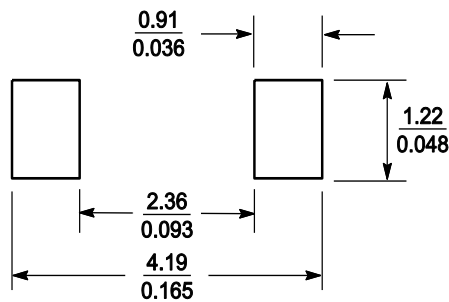
Notes:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETERS.
3. MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF BASE MATERIAL.
4. DIMENSIONS D AND E DO NOT INCLUDE MOLD FLASH, PROTRUSIONS OR GATE BURRS.



DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.94	1.17	1.35	0.037	0.046	0.053
A1	0.00	0.05	0.10	0.000	0.002	0.004
b	0.51	0.61	0.71	0.020	0.024	0.028
c	---	---	0.15	---	---	0.006
D	1.40	1.60	1.80	0.055	0.063	0.071
E	2.54	2.69	2.84	0.100	0.106	0.112
HE	3.56	3.68	3.86	0.140	0.145	0.152
L	0.25	---	---	0.010	---	---
theta	0°	---	10°	0°	---	10°

7.SOLDERING FOOTPRINT



SCALE 10:1 (mm/inches)

