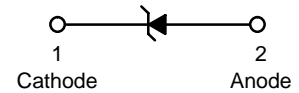
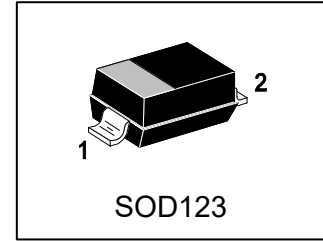


# MBR140

## S-MBR140

Surface Mount Schottky Power Rectifier



### 1. FEATURES

- Small power mold type.
- Low IR
- High reliability.
- Silicon epitaxial planar
- 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
MBR140	S7	3000/Tape&Reel

### 3. MAXIMUM RATINGS(Ta = 25°C)

Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	VRM	40	V
Reverse voltage (DC)	VR	40	V
Average rectified forward current	IO	1	A
Forward current surge peak (60Hz · 1cyc)	IFSM	5.5	A
Junction temperature	TJ	150	°C
Storage temperature range	TSTG	-40 ~ +150	°C

### 4. THERMAL CHARACTERISTICS

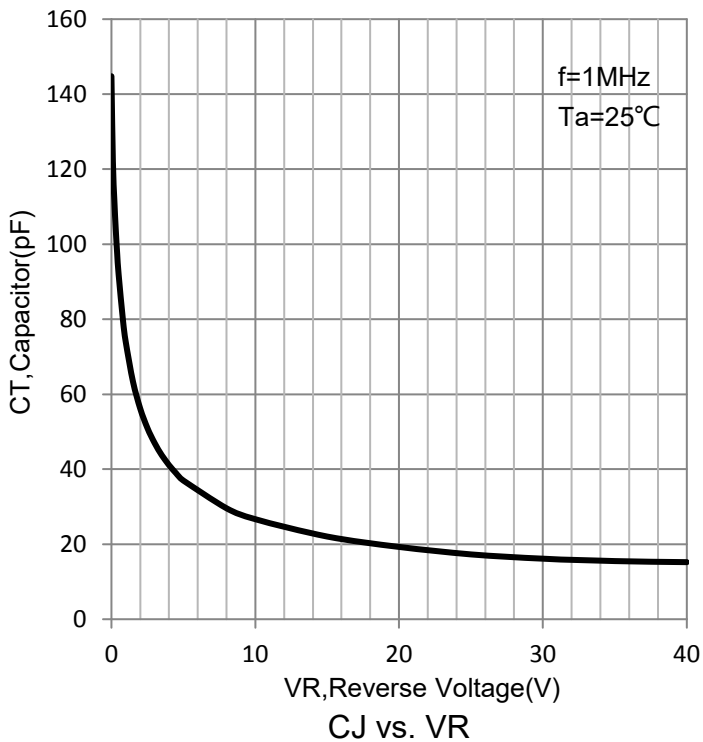
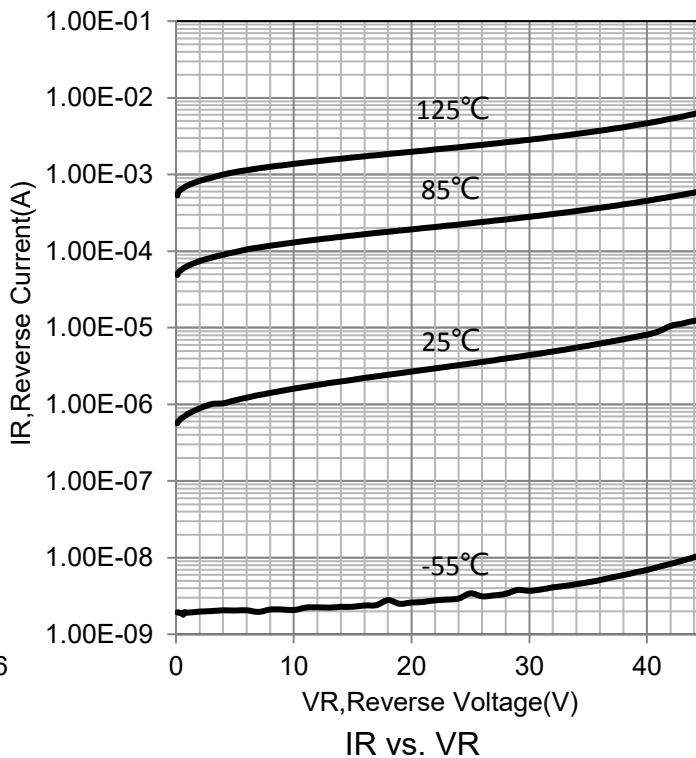
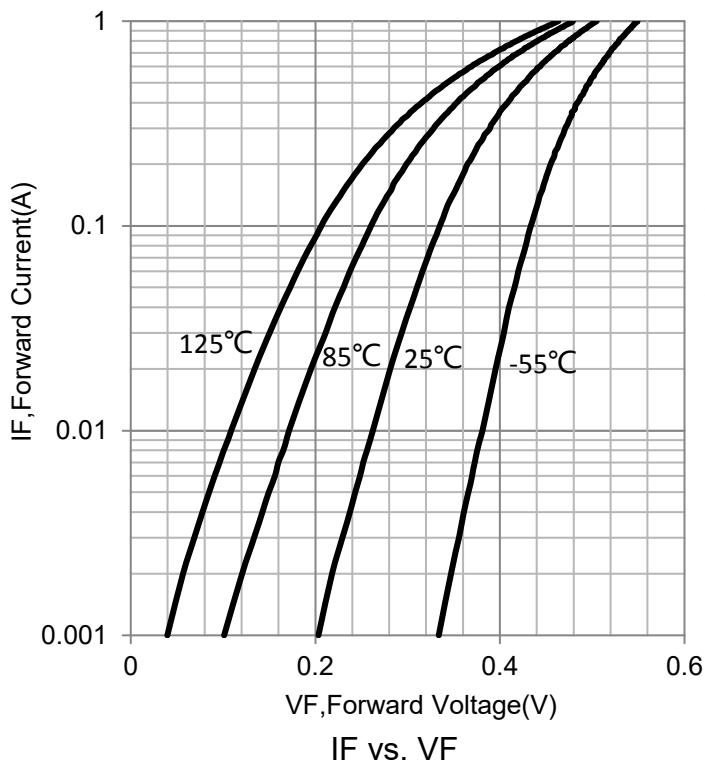
Parameter	Symbol	Limits	Unit
Power Dissipation	PD	400	mW
Thermal Resistance,Junction-to-Ambient	RθJA	312	°C/W
Thermal Resistance,Junction-to-Case	RθJC	150	°C/W

### 5. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Characteristic	Symbol	Min	Typ.	Max	Unit
Forward voltage (IF = 1.0 A)	VF	-	0.54	0.56	V
Reverse current (VR=40V)	IR	-	4	30	μA



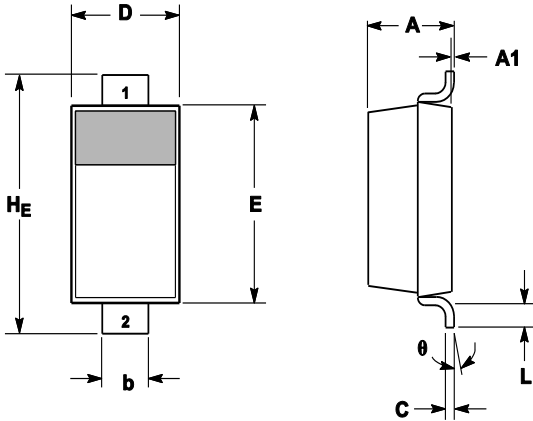
6.ELECTRICAL CHARACTERISTICS CURVES



**7.OUTLINE AND DIMENSIONS**

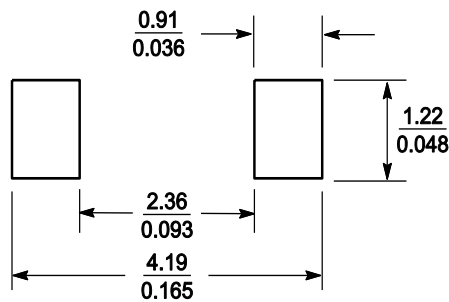
Notes:

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°

**8.SOLDERING FOOTPRINT**



SCALE 10:1 (mm/inches)

