

# Surface Mount Schottky Power Rectifier

## Plastic SOD-123 Package

### Features

- Small power mold type.
- Low  $I_R$ .
- High reliability.
- We declare that the material of product compliance with RoHS requirements.

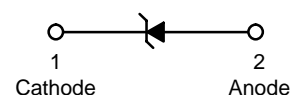
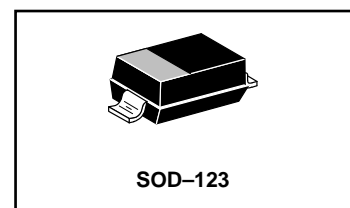
### Construction

- Silicon epitaxial planar

### Mechanical Characteristics

- Device Marking: S7
- Polarity Designator: Cathode Band
- Weight: 11.7 mg (approximately)
- Case: Epoxy, Molded
- Finish: All External Surfaces Corrosion Resistant and Terminal Leads are Readily Solderable
- Lead and Mounting Surface Temperature for Soldering Purposes: 260°C Max. for 10 Seconds

**LMBR140T1G**



### ORDERING INFORMATION

Device	Package	Shipping
LMBR140T1G	SOD-123	3000/Tape & Reel
LMBR140T3G	SOD-123	10,000/Tape & Reel

### Absolute maximum ratings ( $T_a=25^\circ\text{C}$ )

Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	$V_{RM}$	40	V
Reverse voltage (DC)	$V_R$	40	V
Average rectified forward current	$I_o$	1	A
Forward current surge peak (60Hz·1cyc)	$I_{FSM}$	5.5	A
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-40 to +150	$^\circ\text{C}$

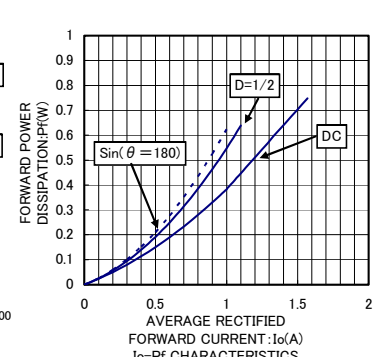
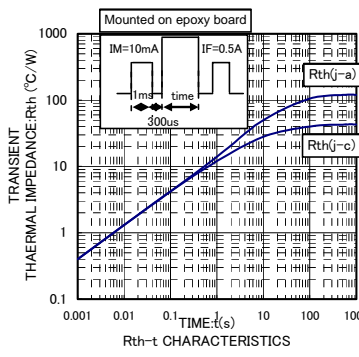
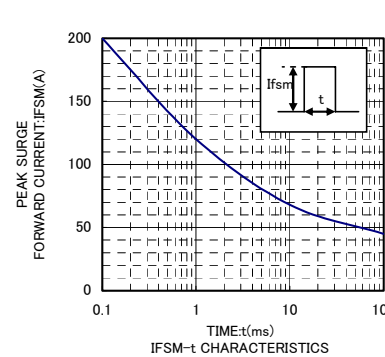
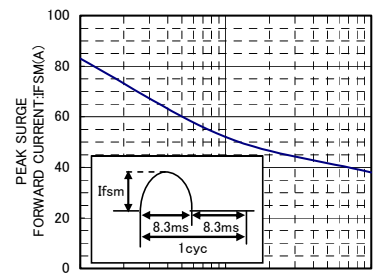
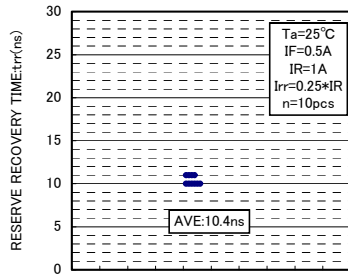
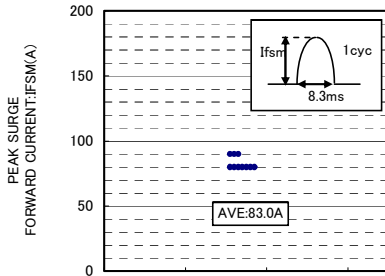
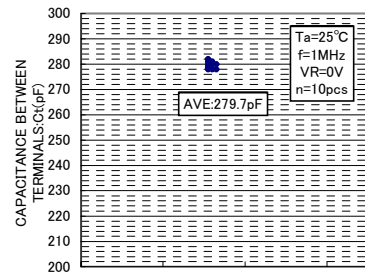
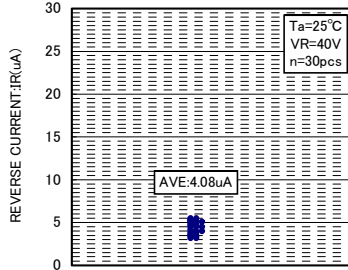
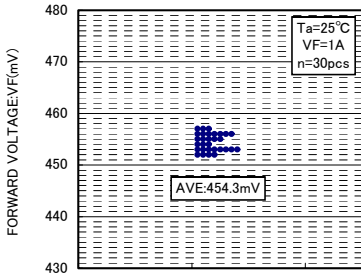
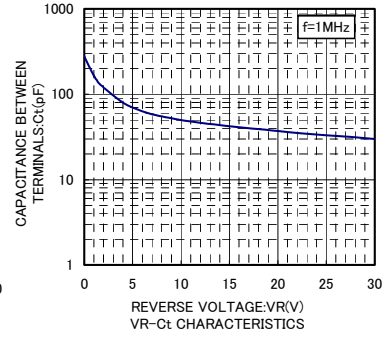
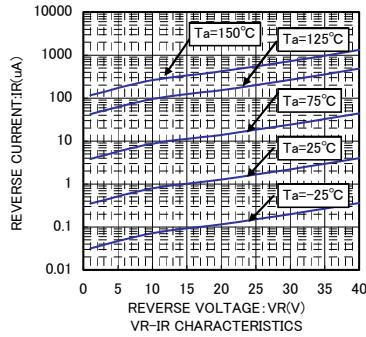
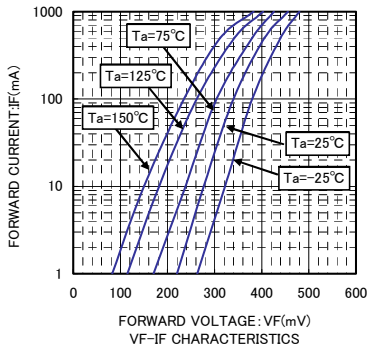
(\*1) Mounted on epoxy board. 180° Half sine wave

### Electrical characteristics ( $T_a=25^\circ\text{C}$ )

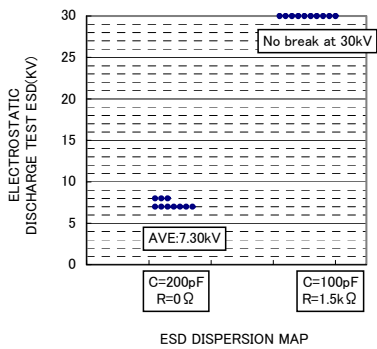
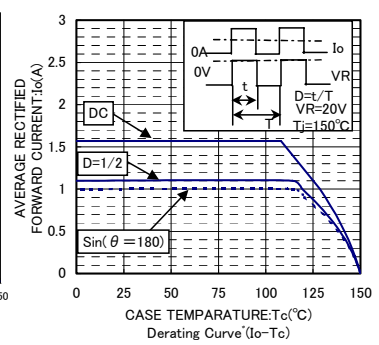
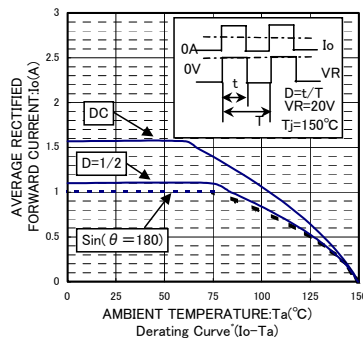
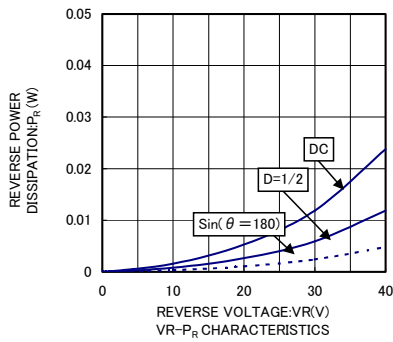
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_F$	-	0.54	0.56	V	$I_F=1.0\text{A}$
Reverse current	$I_R$	-	4.0	30	$\mu\text{A}$	$V_R=40\text{V}$

LMBR140T1G

Electrical characteristic curves (Ta=25°C)

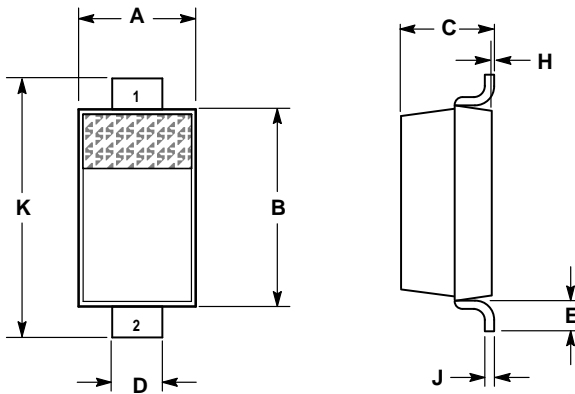


### LMBR140T1G



**LMBR140T1G**

**PACKAGE DIMENSIONS**  
**SOD-123**

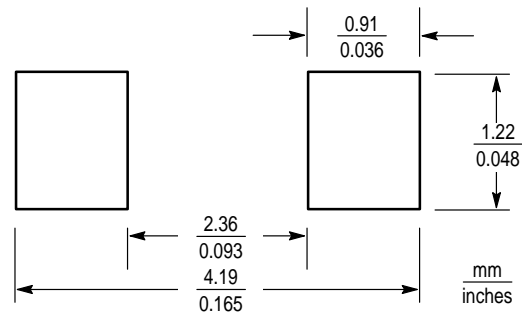


NOTES:  
1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.  
2. CONTROLLING DIMENSION: INCH.

DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.055	0.071	1.40	1.80
B	0.100	0.112	2.55	2.85
C	0.037	0.053	0.95	1.35
D	0.020	0.028	0.50	0.70
E	0.004	—	0.25	—
H	0.000	0.004	0.00	0.10
J	—	0.006	—	0.15
K	0.140	0.152	3.55	3.85

STYLE 1:  
PIN 1. CATHODE  
2. ANODE

**RECOMMENDED FOOTPRINT FOR SOD-123**



**SOD-123**