

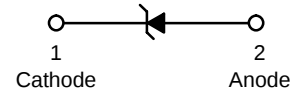
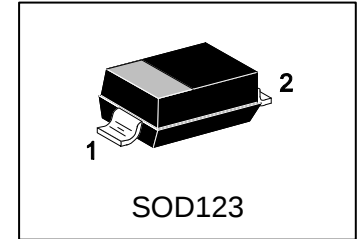
LMBR0540T1G

S-LMBR0540T1G

Surface Mount Schottky Power Rectifier

1. FEATURES

- Guardring for Stress Protection
- Very Low Forward Voltage
- Epoxy Meets UL 94 V-0 @ 0.125 in
- Package Designed for Optimal Automated Board Assembly
- 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
LMBR0540T1G	B4	3000/Tape&Reel
LMBR0540T3G	B4	10000/Tape&Reel

3. MAXIMUM RATINGS(Ta = 25°C)

Parameter	Symbol	Limits	Unit
Peak Repetitive Reverse Voltage	VRRM	40	V
Working Peak Reverse Voltage	VRWM	40	V
DC Blocking Voltage	VR	40	V
Average Rectified Forward Current (At Rated VR , TC = 115°C)	IO	0.5	A
Peak Repetitive Forward Current (At Rated VR , Square Wave, 20 kHz, TC = 115°C)	IFRM	1	A
NonRepetitive Peak Surge Current(Surge Applied at Rated Load Conditions Halfwave,Single Phase, 60 Hz)	IFSM	5.5	A
Storage/Operating Case Temperature Range	TSTG,TO	-55 ~ +150	°C
Junction Temperature	TJ	-55 ~ +150	°C
Voltage Rate of Change(Rated VR , TJ = 25°C)	dv/dt	1000	V/μS

4. THERMAL CHARACTERISTICS

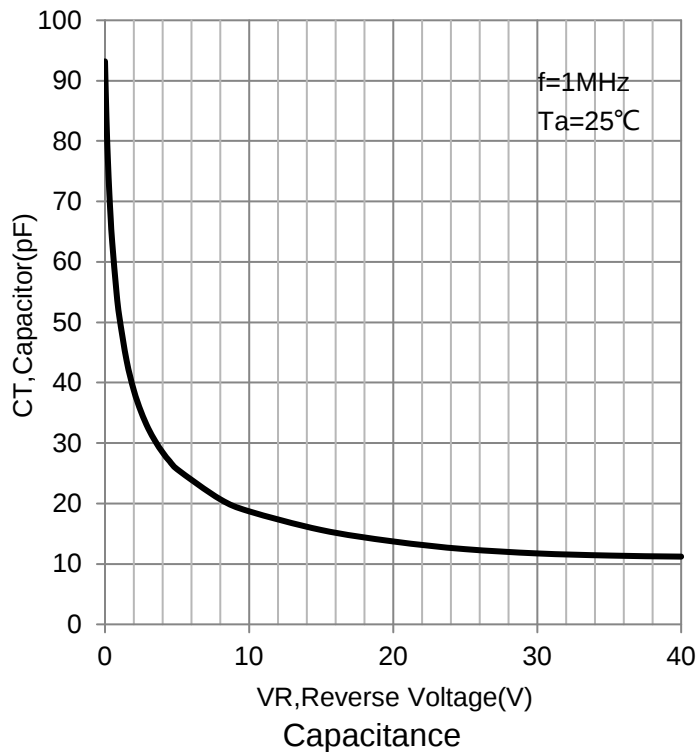
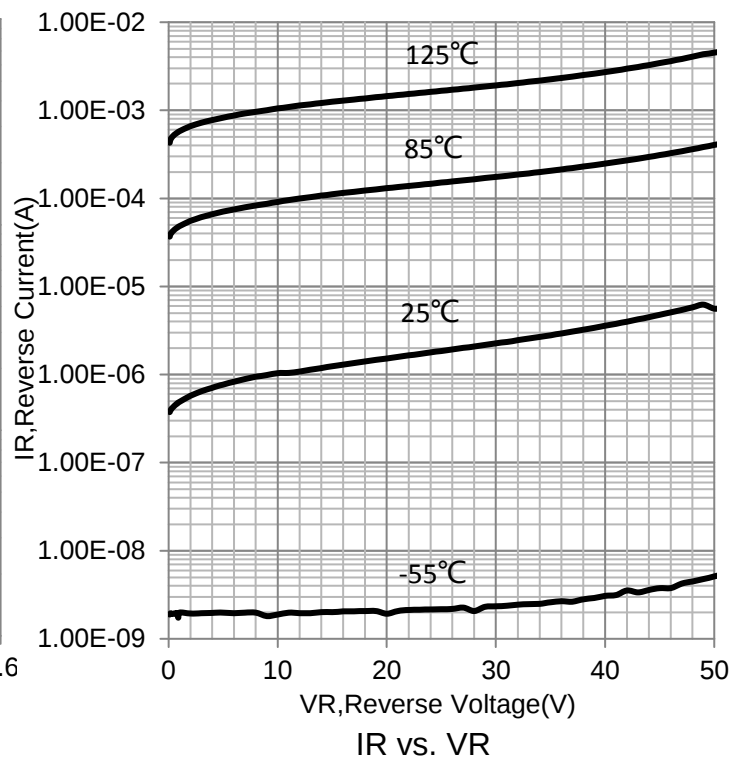
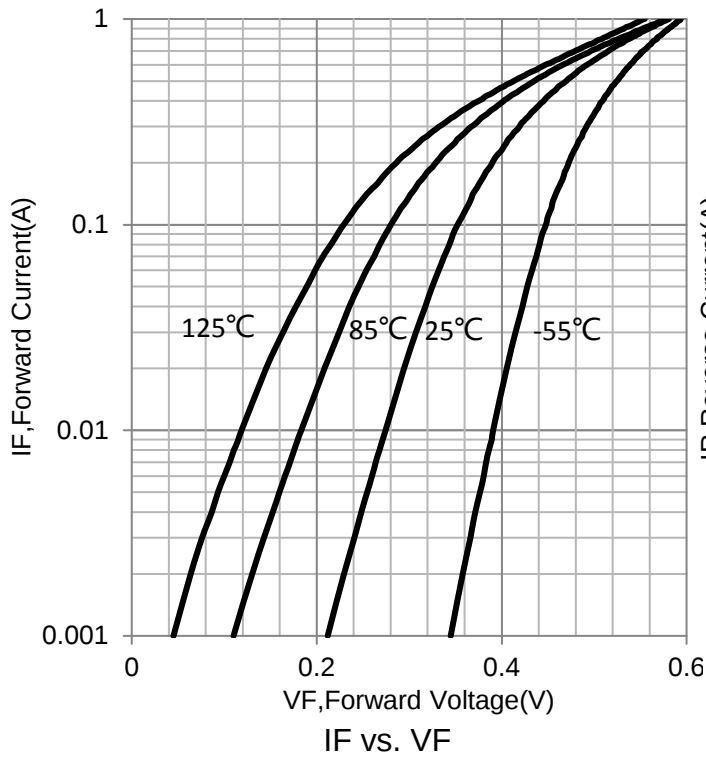
Parameter	Symbol	Limits	Unit
Thermal Resistance – Junction-to-Lead (Note 1)	RθJL	118	°C/W
Thermal Resistance – Junction-to-Ambient (Note 2)	RθJA	206	

5. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

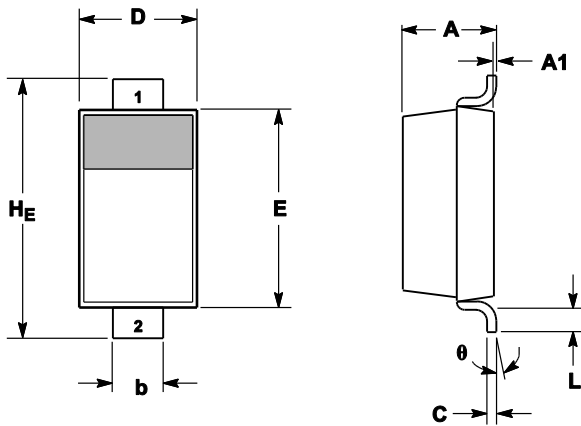
Characteristic	Symbol	TJ = 25°C	TJ = 100°C	Unit
Maximum Instantaneous Forward Voltage (Note 3) (IF = 0.5 A)	VF	0.55	0.53	V
(IF = 1 A)		0.65	0.63	
Maximum Instantaneous Reverse Current (Note 3) (VR = 40 V)	IR	20	13000	μA
(VR = 20 V)		10	5000	

1. Mounted with minimum recommended pad size, PC Board FR4.
2. 1 inch square pad size (1 X 0.5 inch for each lead) on FR4 board.
3. Pulse Test: Pulse Width $\leq$ 250 μ s, Duty Cycle $\leq$ 2.0%.

6.ELECTRICAL CHARACTERISTICS CURVES



7.OUTLINE AND DIMENSIONS

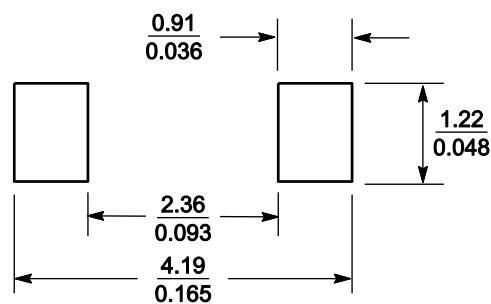


Notes:

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
H _E	3.56	3.68	3.86	0.140	0.145	0.152
L	0.25	---	---	0.010	---	---
θ	0°	---	10°	0°	---	10°

8.SOLDERING FOOTPRINT



SCALE 10:1 (mm/inches)