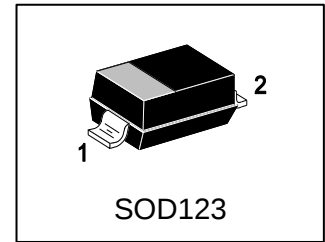


LMBR0520T1G

Schottky Power Rectifier

1. FEATURES

- Guardring for Stress Protection
- Low Forward Voltage
- 125°C Operating Junction Temperature
- Package Designed for Optimal Automated Board Assembly
- We declare that the material of product compliance with RoHS requirements and Halogen Free.



2. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
LMBR0520T1G	B2	3000/Tape&Reel
LMBR0520T3G	B2	10000/Tape&Reel

3. MAXIMUM RATINGS(Ta = 25°C)

Parameter	Symbol	Limits	Unit
Maximum repetitive peak reverse voltage	VRRM	20	V
Working Peak Reverse Voltage	VRWM		
Maximum DC blocking voltage	VR		
Average Rectified Forward Current (Rated VR) TL = 90°C	IF(AV)	0.5	A
Non-Repetitive Peak Surge Current (Surge Applied at Rated Load Conditions, Halfwave, Single Phase, 60 Hz)	IFSM	5.5	A
Maximum Power Dissipation	PD	300	mW
Thermal resistance (Note 1)	RθJA	340	°C/W
	RθJL	150	
Junction temperature range	TJ	-65 ~ +125	°C
Storage temperature range	Tstg	-65 ~ +125	°C
Voltage Rate of Change (Rated VR)	dv/dt	1000	V/μs

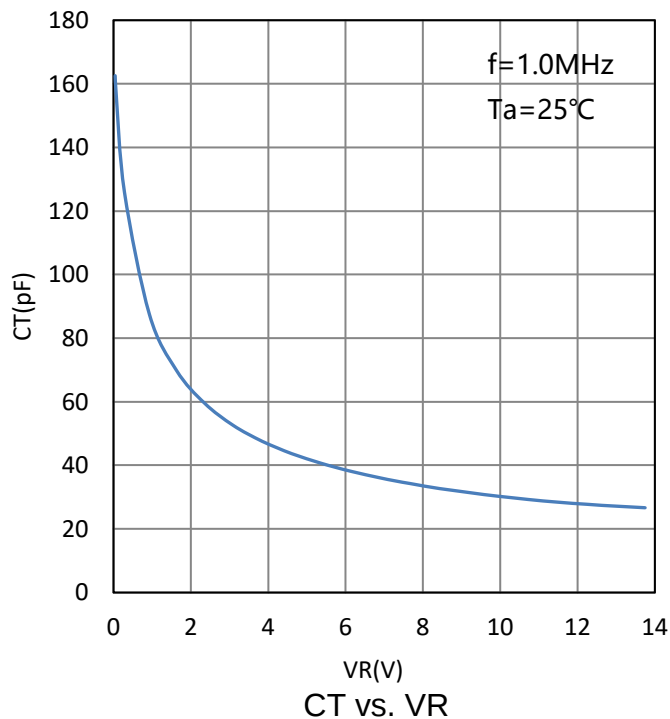
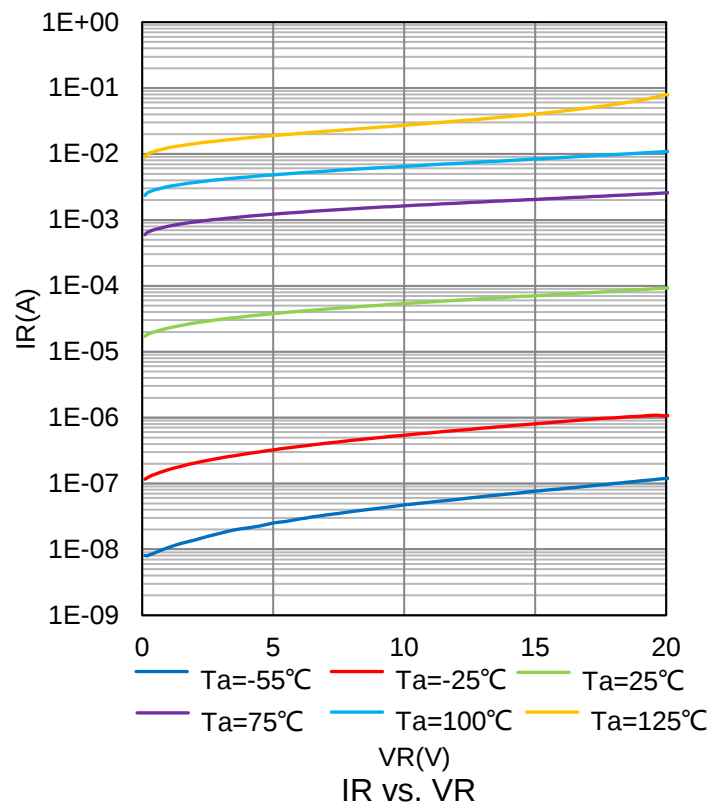
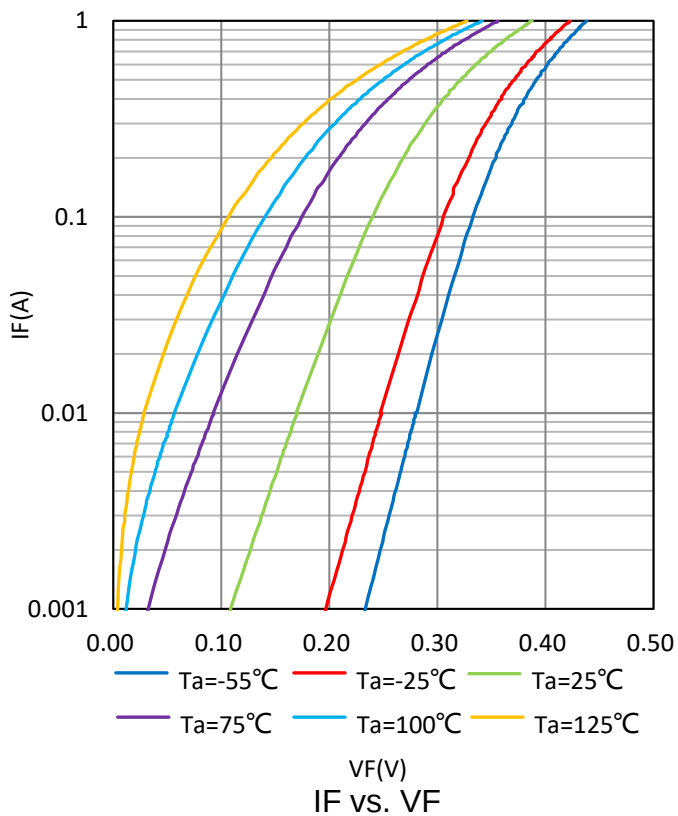
1. FR-4 or FR-5 = 3.5 x 1.5 inches using the Motorola minimum recommended footprint.

4. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

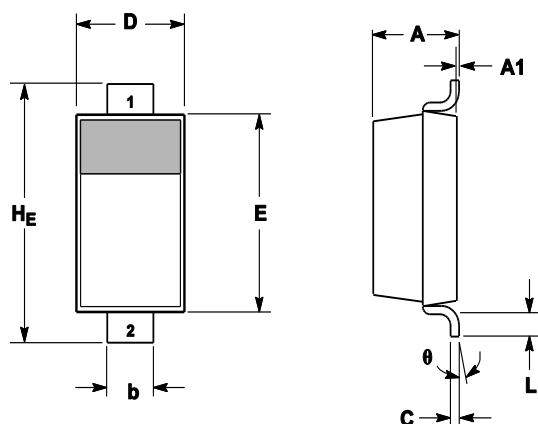
Characteristic	Symbol	Min	Typ.	Max	Unit
Reverse Breakdown Voltage (IR=1mA)	VBR	20	-	-	V
Maximum instantaneous forward Voltage(Note 2) (IF = 0.1 A, TJ = 25°C) (IF = 0.5 A, TJ = 25°C) (IF = 0.1 A, TJ = 100°C) (IF = 0.5 A, TJ = 100°C)	VF	- - - -	- - - -	0.3 0.385 0.22 0.33	V
Maximum Instantaneous Reverse Current (Note 2) (VR=10V, TJ = 25°C) (VR=20V, TJ = 25°C) (VR=10V, TJ = 100°C) (VR=20V, TJ = 100°C)	IR	- - - -	- - - -	75 250 5 8	μA μA mA mA

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

5.ELECTRICAL CHARACTERISTICS CURVES



6.OUTLINE AND DIMENSIONS

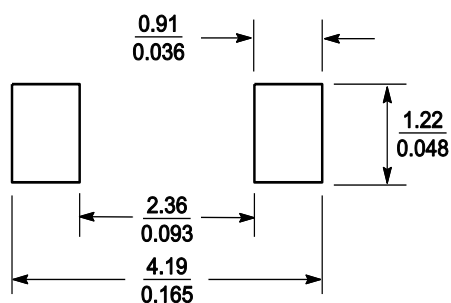


Notes:

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

7.SOLDERING FOOTPRINT



SCALE 10:1 (mm / inches)

DISCLAIMER

- Curve guarantee in the specification. The curve of test items with electric parameter is used as quality guarantee. The curve of test items without electric parameter is used as reference only.
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