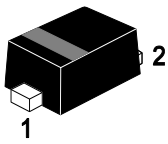
LRB520S-30T1G

SCHOTTKY BARRIER DIODE



SOD523(SC-79)



1. FEATURES

- We declare that the material of product compliance with RoHS requirements and Halogen Free.
- Extremely fast switching speed
- Extremely low forward voltage 0.6 V (max) @ IF = 200mA
- Low reverse current

2. APPLICATIONS

- Low current rectification and high speed switching

3. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
LRB520S-30T1G	5J	5000/Tape&Reel
LRB520S-30T5G	5J	10000/Tape&Reel

4. MAXIMUM RATINGS (Ta = 25°C)

Parameter	Symbol	Limit	Unit
DC reverse voltage	VR	30	V
Mean rectifying current	IO	200	mA
Peak forward surge current	IFSM	1	A

5. THERMAL CHARACTERISTICS

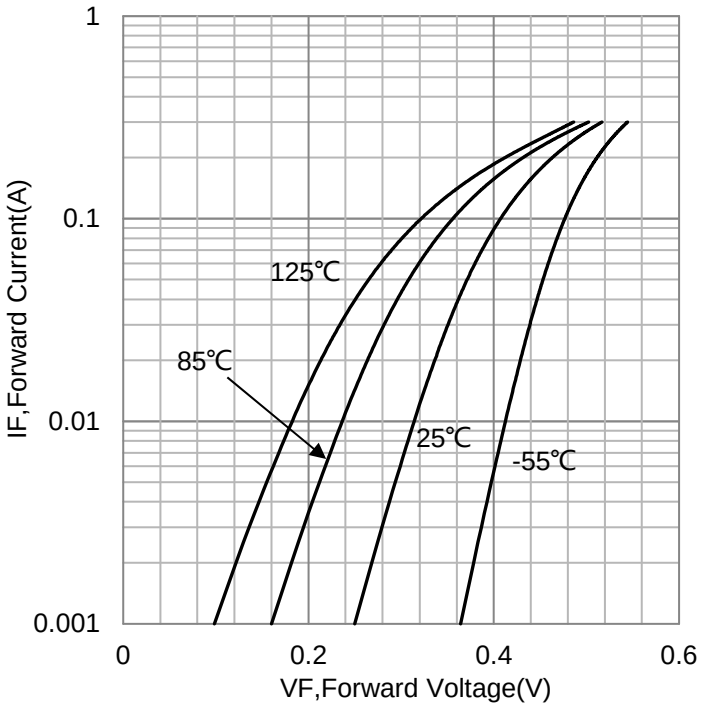
Parameter	Symbol	Limits	Unit
Total Device Dissipation, FR−5 Board (Note 1) @ TA = 25ºC Derate above 25ºC	PD	 200 2	 mW mW/ºC
Thermal Resistance, Junction–to–Ambient(Note 1)	RΘJA	500	ºC/W
Junction and Storage temperature	TJ,Tstg	−55～+125	°C

1. FR–5 = 1.0×0.75×0.062 in.

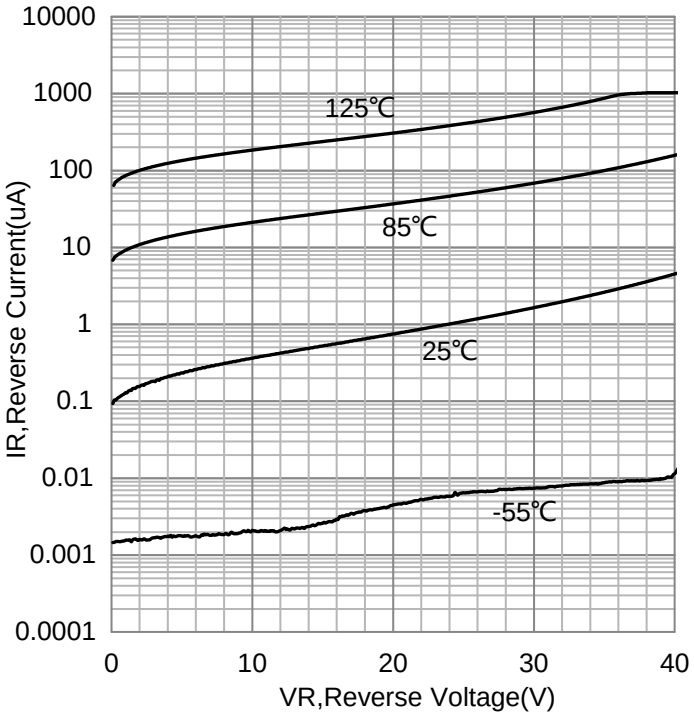
6. ELECTRICAL CHARACTERISTICS (Tj =25°C unless otherwise specified.)

Parameter	Symbol	Min	Typ.	Max	Unit
Forward voltage (IF =200mA)	VF	-	-	0.6	V
Reverse current (VR =10V)	IR	-	-	1	μA

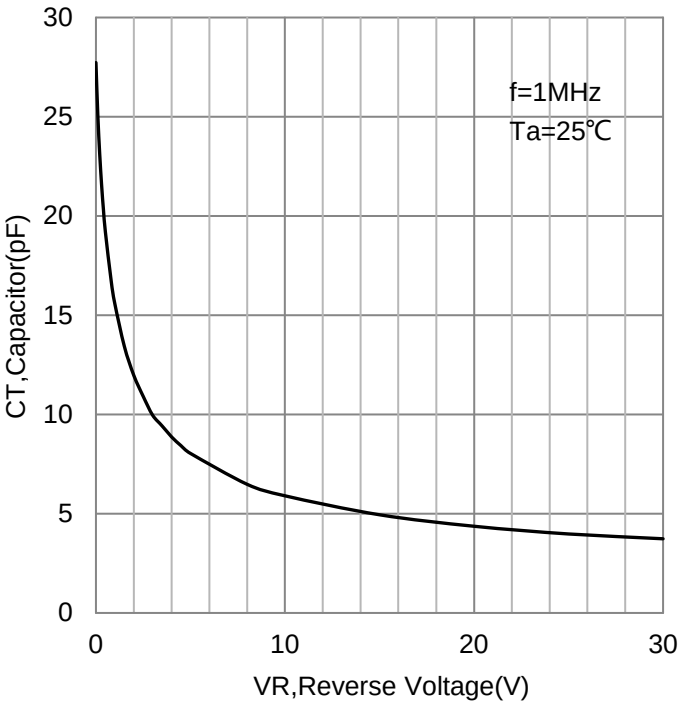
7.ELECTRICAL CHARACTERISTICS CURVES



IF vs. VF

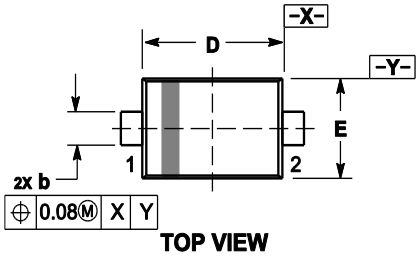


IR vs. VR

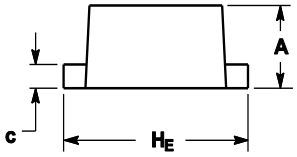


CT vs. VR

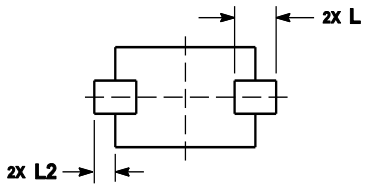
8.OUTLINE AND DIMENSIONS



TOP VIEW



SIDE VIEW



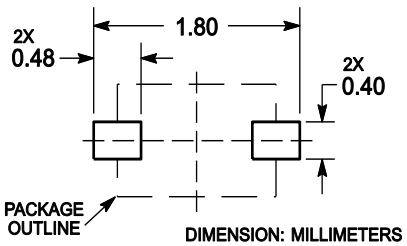
BOTTOM VIEW

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.

	MILLIMETERS			INCHES		
DIM	MIN	NOM	MAX	MIN	NOM	MAX
A	0.50	0.60	0.70	0.020	0.024	0.028
b	0.25	0.30	0.35	0.010	0.012	0.014
c	0.07	0.14	0.20	0.003	0.006	0.008
D	1.10	1.20	1.30	0.043	0.047	0.051
E	0.70	0.80	0.90	0.028	0.031	0.035
H_E	1.50	1.60	1.70	0.059	0.063	0.067
L	0.30 REF			0.012 REF		
L_2	0.15	0.20	0.25	0.006	0.008	0.010

9.SOLDERING FOOTPRINT



DIMENSION: MILLIMETERS

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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