LITE-ON SEMICONDUCTORS

RB491D

SURFACE MOUNT
SCHOTTKY BARRIER DIODE

REVERSE VOLTAGE – 25 Volts
FORWARD CURRENT – 1.0 Ampere

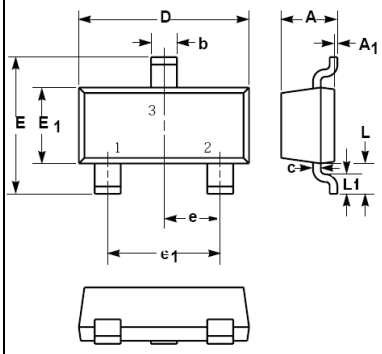
FEATURES

- Low Turn-on Voltage
- Fast Switching
- PN Junction Guard Ring for Transient and ESD Protection

MECHANICAL DATA

- Case: SOT-23 Plastic
- Case Material: “Green” molding compound, UL flammability classification 94V-0, (No Br. Sb. Cl)
- Moisture Sensitivity: Level 1 per J-STD-020D
- Lead Free in RoHS 2002/95/EC Compliant

SOT-23



SOT-23		
Dim.	Min.	Max.
A	0.90	1.15
A1	0.00	0.10
b	0.30	0.50
c	0.08	0.15
D	2.80	3.00
E	2.25	2.55
E1	1.20	1.40
e	0.95 Typ.	
e1	1.80	2.00
L	0.55 Ref.	
L1	0.30	0.50
Dimensions in millimeter		

Maximum Ratings & Thermal Characteristics @ T_A = 25℃ unless otherwise specified

Characteristic	Symbol	RB491D	Units
Peak Reverse Voltage	V_{RM}	25	V
DC Blocking Voltage	V_R	20	V
Average Rectifier Forward Current	$I_{F(AV)}$	1	A
Peak Forward Surge Current@t=8.3ms	I_{FSM}	3	A
Operating Temperature Range	T_J	125	℃
Storage Temperature Range	T_{STG}	-40~+125	℃

Electrical Characteristics @ T_A = 25℃ unless otherwise specified

Characteristic	Test Condition	Symbol	RB491D	Unit
Maximum Forward Voltage	I_F = 1A	V_F	450	mV
Maximum DC Reverse Current at Rated DC Blocking Voltage	V_R = 20V	I_R	200	uA
Typical Diode Capacitance	V_R =10V,f=1MHz	C_D	80	pF

REV. 2, Oct-2010, KSHR38

RATING AND CHARACTERISTIC CURVES
RB491D

FIG.1- TYPICAL FORWORD CHARACTERISTICS

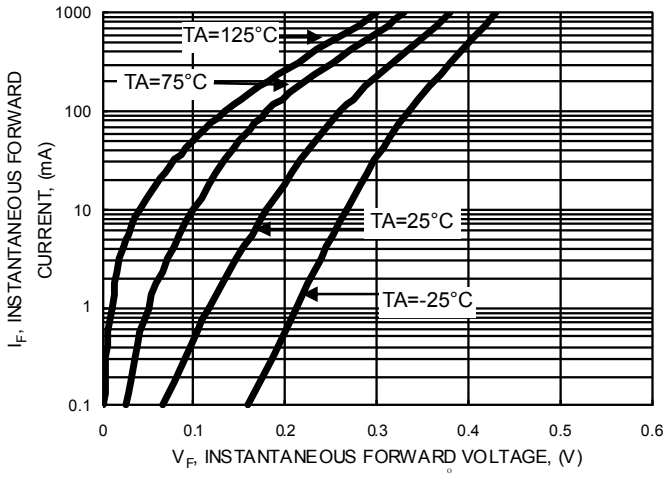
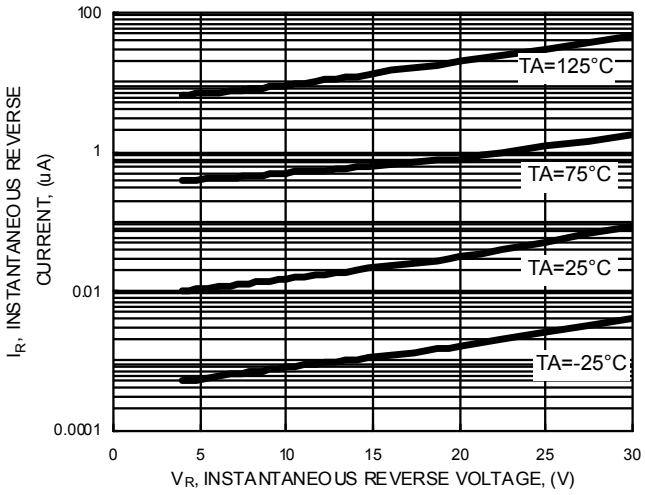


FIG.2- TYPICAL REVERSE CHARACTERISTICS



Device Marking :

Device P/N	Marking	Equivalent Circuit Diagram
RB491D	D2E	

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