

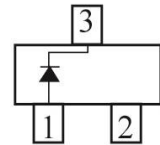
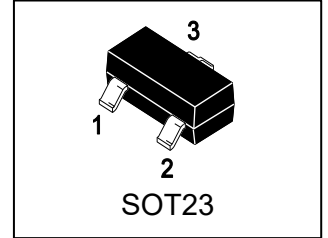
# RB491DL

# S-RB491DL

Schottky Barrier Diode

## 1. FEATURES

- 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.
- Ultra low VF.(VF=0.40V Typ.at 1A)
- IF=1.0A guaranteed despite the size



## 2. APPLICATIONS

- Low-power rectification
- For switching power supply

## 3. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
RB491DL	D2E	3000/Tape&Reel

## 4. MAXIMUM RATINGS(Ta = 25°C)

Parameter	Symbol	Limits	Unit
Peak Reverse Voltage	VRM	25	V
DC Reverse Voltage	VR	20	V
DC Forward Current	IF	1.0	A
Peak Forward Surge Current	IFMS	3.0	A

## 5. THERMAL CHARACTERISTICS

Parameter	Symbol	Limits	Unit
Total Device Dissipation, FR-5 Board (Note 1) @ TA = 25°C Derate above 25°C	PD	200 1.57	mW mW/°C
Thermal Resistance, Junction-to-Ambient(Note 1)	ROJA	635	°C/W
Junction and Storage temperature	TJ,Tstg	-40~+125	°C

1. FR-5 = 1.0×0.75×0.062 in.

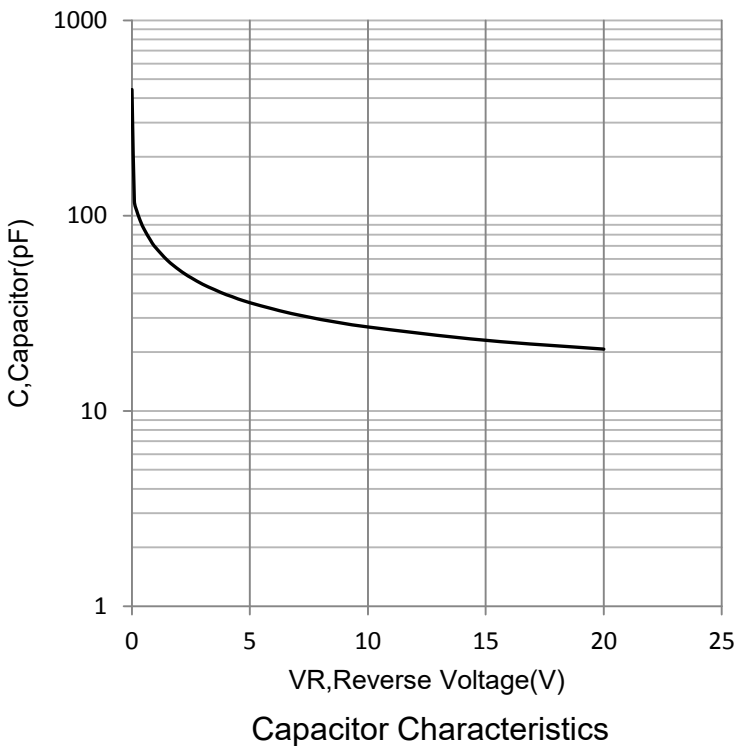
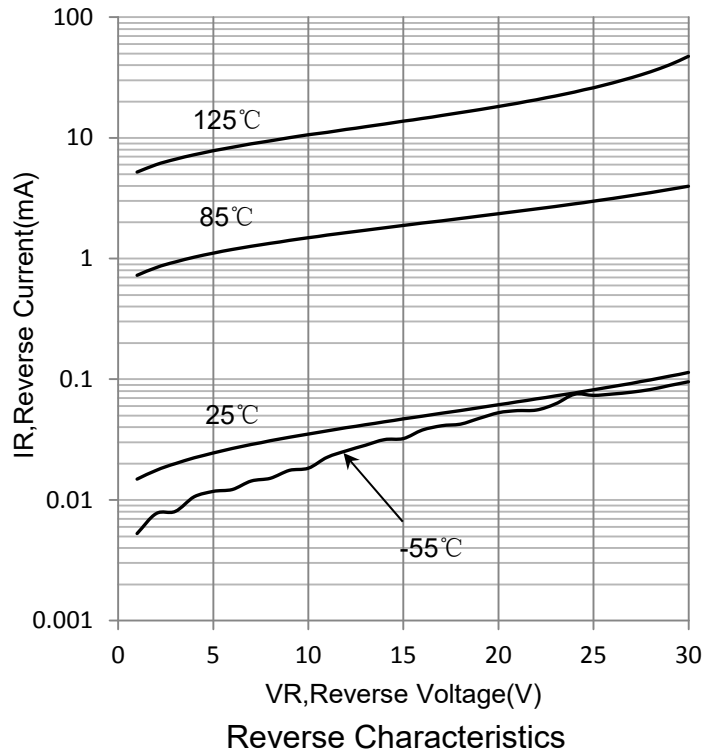
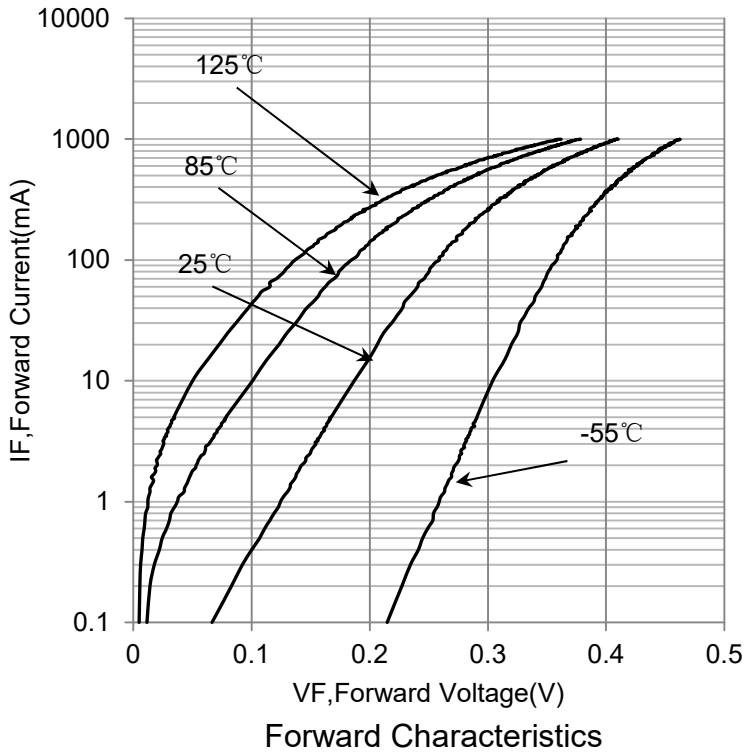


**6. ELECTRICAL CHARACTERISTICS (Ta= 25°C)**

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage (IR=600μA)	VBR	25	-	-	V
Forward voltage (IF=1A)	VF	-	-	0.45	V
Reverse Current (VR=20V)	IR	-	-	200	μA



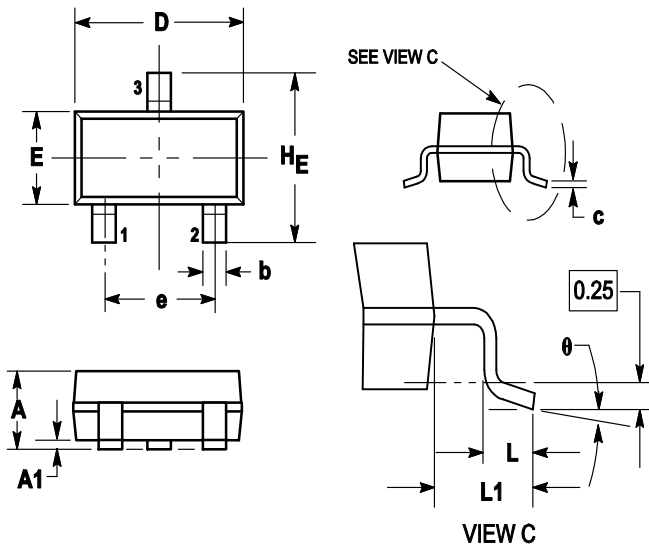
**7. ELECTRICAL CHARACTERISTICS CURVES**



**8. 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	0.89	1	1.11	0.035	0.04	0.044
A1	0.01	0.06	0.1	0.001	0.002	0.004
b	0.37	0.44	0.5	0.015	0.018	0.02
c	0.09	0.13	0.18	0.003	0.005	0.007
D	2.80	2.9	3.04	0.11	0.114	0.12
E	1.20	1.3	1.4	0.047	0.051	0.055
e	1.78	1.9	2.04	0.07	0.075	0.081
L	0.10	0.2	0.3	0.004	0.008	0.012
L1	0.35	0.54	0.69	0.014	0.021	0.029
HE	2.10	2.4	2.64	0.083	0.094	0.104
$\theta$	0°	---	10°	0°	---	10°

**9. SOLDERING FOOTPRINT**
