



Micro Commercial Components  
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# RB490D THRU RB491D

## Features

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

## 1Amp Surface Mount Schottky Barrier Diode 20 to 40 Volts

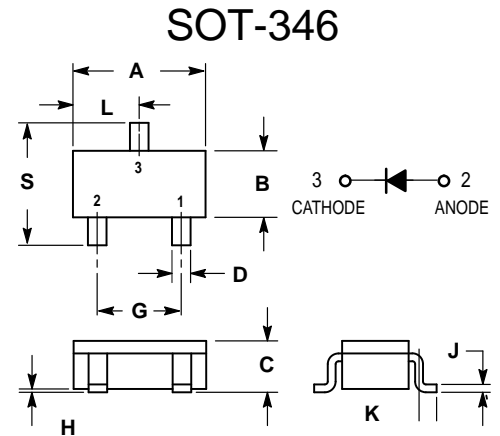
## Mechanical Data

- Case :SOT-346,Molded Plastic
- Terminals :Solderable per MIL-STD-202,Method 208
- Polarity :See Diagrams Below
- Weight :0.008 grams (approx)
- Mountion Position :Any

## Maximum Ratings

- Operating Temperature: -25°C to +125°C
- Storage Temperature: -50°C to +125°C

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
RB491D	10T	20V	14V	20V
RB490D	10F	40V	28V	40V

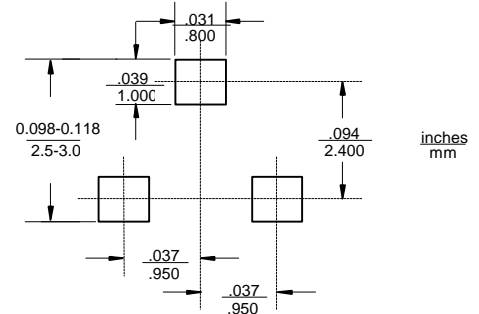


DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.106	.122	2.70	3.10	
B	.051	.067	1.30	1.70	
C	.039	.051	1.00	1.30	
D	.014	.020	0.35	0.50	
G	.067	.091	1.70	2.30	
H	.000	.004	0.00	0.10	
J	.004	.010	0.10	0.26	
K	.008	.024	0.20	0.60	
L	.049	.065	1.25	1.65	
S	.089	.118	2.25	3.00	

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.0A	$T_A = 90^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	5A	8.3ms, half sine
Maximum Forward Voltage Drop Per Element	$V_F$	0.45V 0.53V	$I_{FM} = 1.0A$ $T_J = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	100µA 4.0mA	$T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$

## Suggested Solder Pad Layout



\*Pulse Test: Pulse Width 300µsec, Duty Cycle 1%

# RB490D thru RB491D

## RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CHARACTERISTICS

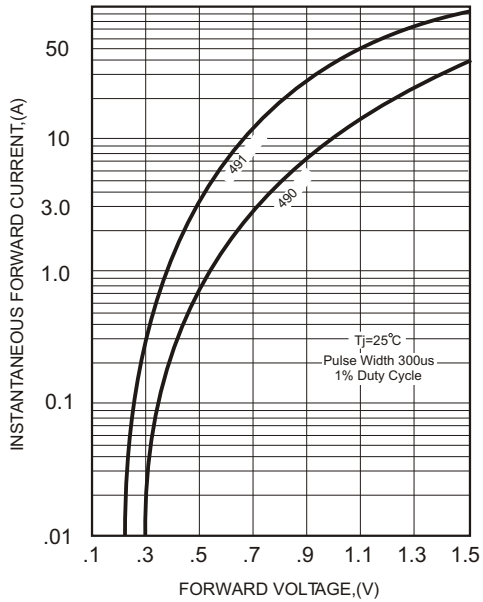


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

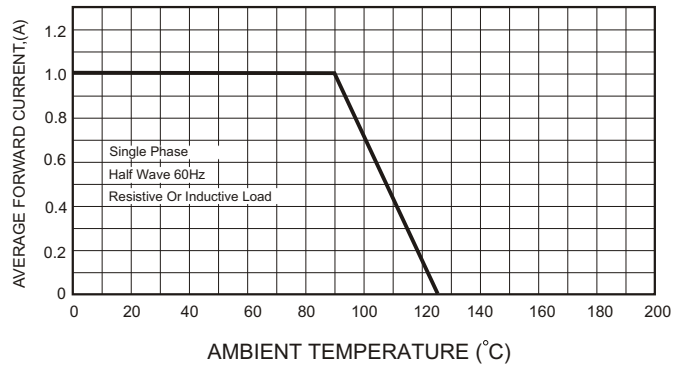


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

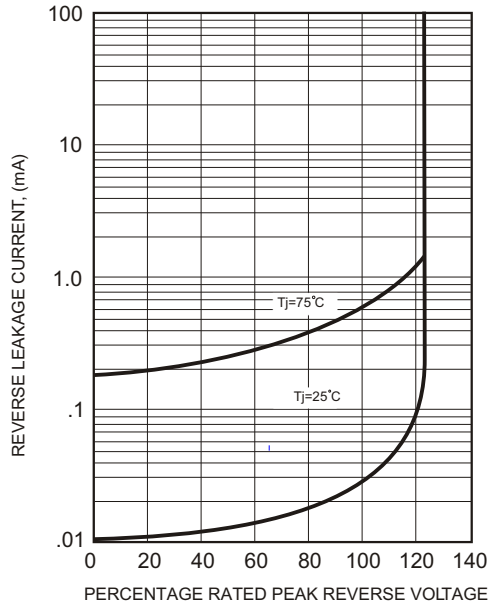


FIG.4-TYPICAL JUNCTION CAPACITANCE

