



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

Mechanical Data

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

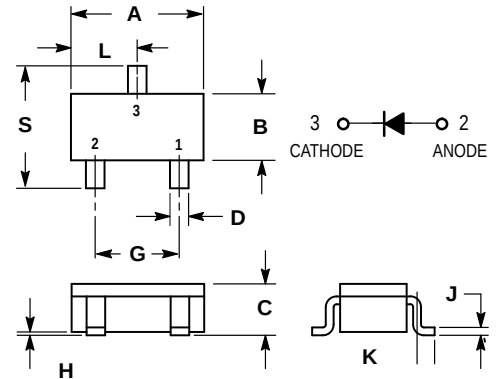
Electrical Characteristics @ 25°C Unless Otherwise Specified

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 RB491D RB490D	V_F	0.45V 0.53V	$I_{FM} = 1.0\text{A}$ $T_J = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	100mA 4.0mA	$T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$

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

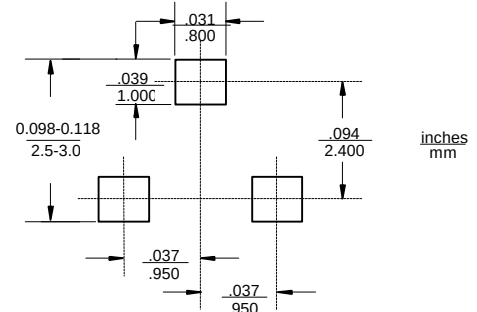
1Amp Surface Mount Schottky Barrier Diode 20 to 40 Volts

SOT-346



DIM	INCHES		MM		NOTE
	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	
E	.067	.091	1.70	2.30	
F	.000	.004	0.00	0.10	
G	.004	.010	0.10	0.26	
H	.008	.024	0.20	0.60	
I	.049	.065	1.25	1.65	
J	.089	.118	2.25	3.00	

Suggested Solder Pad Layout



RB490D thru RB491D

RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CHARACTERISTICS

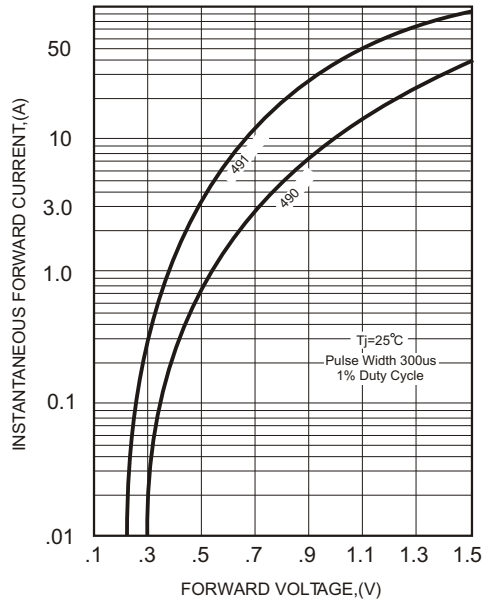


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

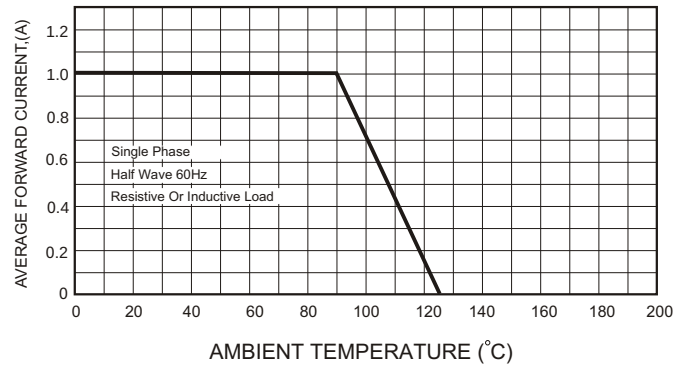


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

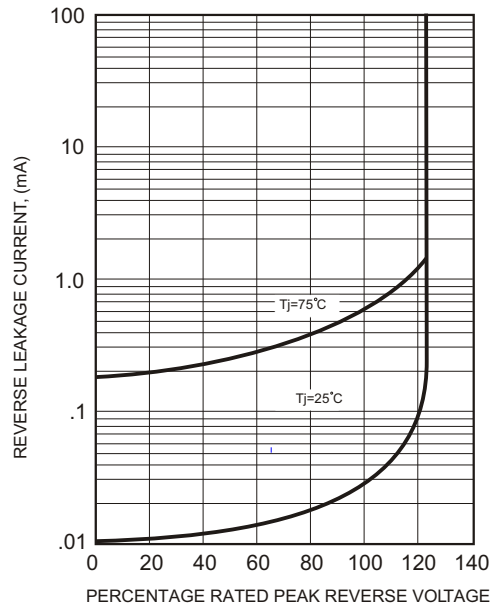


FIG.4-TYPICAL JUNCTION CAPACITANCE

