

ABS Plastic-Encapsulate Bridge Rectifier

● Features

- Ideal for printed circuit board
- Glass passivated chip
- High surge current capability
- Reliable low cost construction utilizing molded plastic technique

Reverse Voltage
1000 V
Forward Current
2 Ampere

● Applications

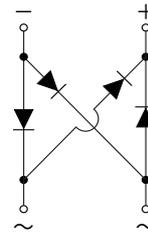
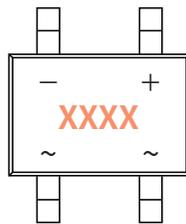
General purpose 1 phase Bridgerectifier applications

● Mechanical Data

- Case: ABS
Molding compound meets UL 94V-0 flammability rating, RoHS-compliant, halogen-free
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026



● Function Diagram



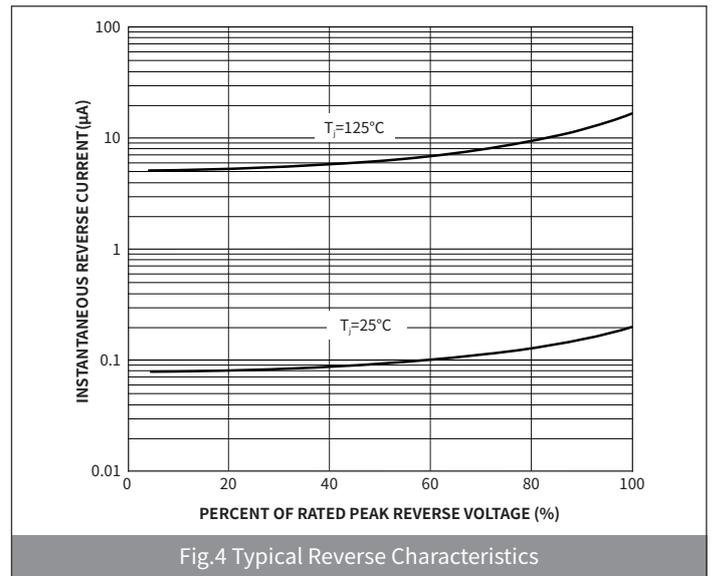
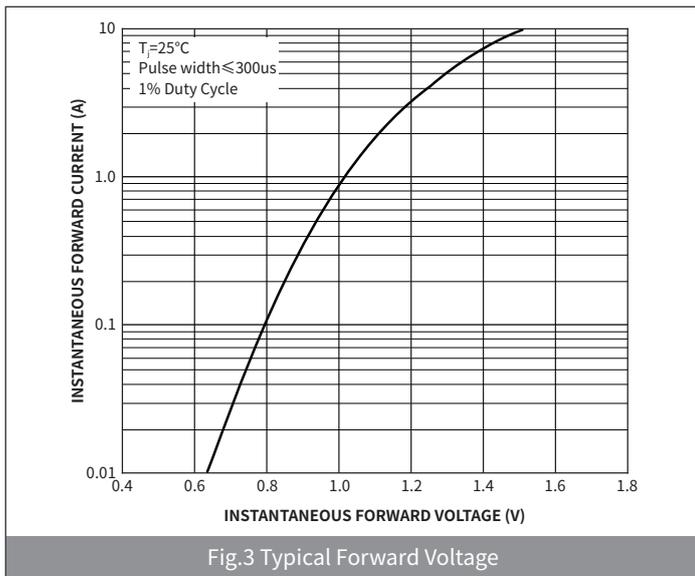
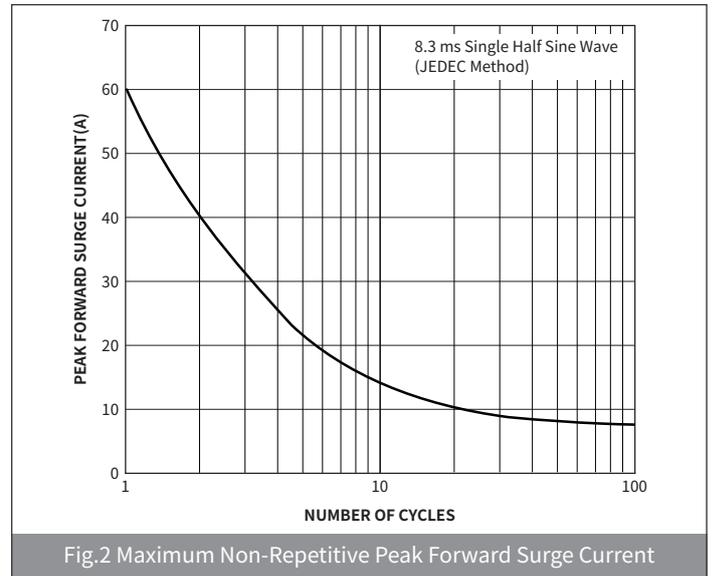
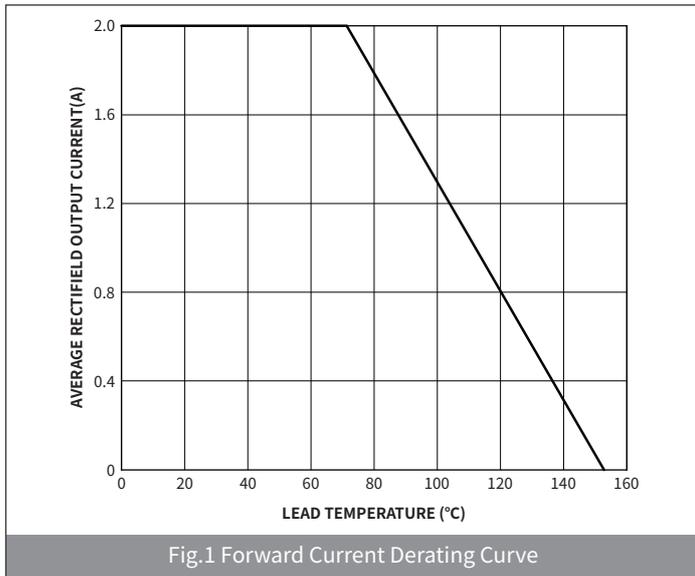
● Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	RABS210B
Device marking code			RABS210B
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	V	1000
Maximum RMS Voltage	V_{RMS}	V	700
Maximum DC blocking Voltage	V_{DC}	V	1000
Maximum Average Forward Rectified Current @60Hz sinewave, Resistance load, TL (Fig.1)	$I_{F(AV)}$	A	2.0
Non-repetitive Peak Forward Surge Current @ t=8.3ms Half-sine wave	I_{FSM}	A	60
Rating for fusing (t=8.3ms, Ta=25 °C)	I^2t	A ² S	14.94
Storage temperature	T_{stg}	°C	-55 ~ +150
Junction temperature	T_j	°C	-55 ~ +150
Typical Thermal Resistance	$R_{\theta J-A}$	°C /W	75
	$R_{\theta J-L}$	°C /W	25

● **Electrical Characteristics** (Ta=25°C Unless otherwise noted)

PARAMETER	TEST CONDITIONS	SYMBOL	UNIT	RABS210B
Maximum instantaneous forward voltage	$I_F=2.0A$	V_F	V	1.3
Maximum DC reverse current at rated DC blocking voltage	$V_R=V_{DC}, T_A=25^\circ C$	I_{R1}	μA	5
	$V_R=V_{DC}, T_A=100^\circ C$	I_{R2}		500
Maximum Reverse Recovery Time	$I_F=0.5A, I_R=1.0A, I_R=0.25A$	T_{RR}	nS	500
Typical junction capacitance	4.0V DC, 1MHz	C_J	pF	15

● **Ratings And Characteristics Curves** (Ta=25°C Unless otherwise specified)



● Ordering Information

PACKAGE	PACKAGE CODE	REEL(pcs)	BOX(pcs)	CARTON(pcs)	DELIVERY MODE
ABS	R3	5000	10000	80000	13"

● Package Outline Dimensions (ABS)

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	1.3	1.5	0.05	0.059
A1	-	0.2	-	0.008
B	3.9	4.1	0.126	0.141
B1	0.5	0.8	0.02	0.031
C	0.15	0.35	0.006	0.014
D	4.9	5.1	0.193	0.201
E	4.3	4.5	0.167	0.177
F	0.3	0.8	0.012	0.031
G	6.2	6.8	0.244	0.267

● Suggested Pad Layout

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
M	5.72	5.9	0.225	0.232
N	4.0	4.2	0.157	0.165
Y	1.0	1.2	0.039	0.047
X	0.9	1.1	0.035	0.043