

ABS Plastic-Encapsulate Bridge Rectifier

Features

- Ideal for printed circuit board
- Small size, simple installation
- High surge current capability
- Reliable low cost construction utilizing molded plastic technique
- High temperature soldering guaranteed: 260/10 seconds at 5lbs., (2.3kg) tension

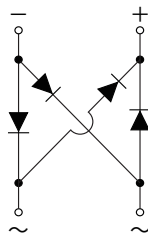
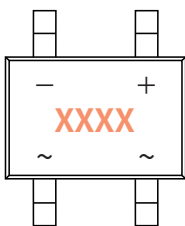
Applications

General purpose 1 phase Bridgerectifier applications

Mechanical Data

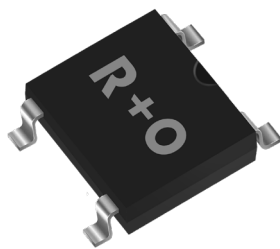
- Case: ABS
Molding compound meets UL 94V-0 flammability rating, RoHS-compliant, halogen-free
- Terminals: Solder plated, solderable per MIL-STD-750,Method 2026
- Polarity: Cathode line denotes the cathode end

Function Diagram



Reverse Voltage
20-200 V
Forward Current
3.0 Ampere

ABS



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

PARAMETER	SYMBOL	UNIT	AB32S	AB34S	AB36S	AB38S	AB310S	AB315S	AB320S
Device marking code			AB32S	AB34S	AB36S	AB38S	AB310S	AB315S	AB320S
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	V	20	40	60	80	100	150	200
Maximum RMS Voltage	V_{RMS}	V	14	28	42	56	70	105	140
Maximum DC blocking Voltage	V_{DC}	V	20	40	60	80	100	150	200
Maximum Average Forward Rectified Current @60Hz sinewave, Resistance load,TL (Fig.1)	$I_{F(AV)}$	A	3.0						
Non-repetitive Peak Forward Surge Current @ t=8.3ms Half-sine wave	I_{FSM}	A	80						
Rating for fusing (t=8.3ms, Ta=25 °C)	I^2t	A ² S	26						
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	18						

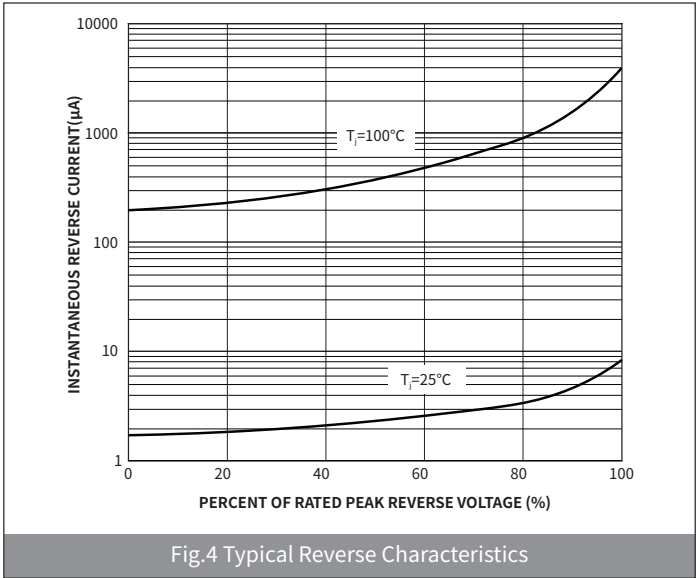
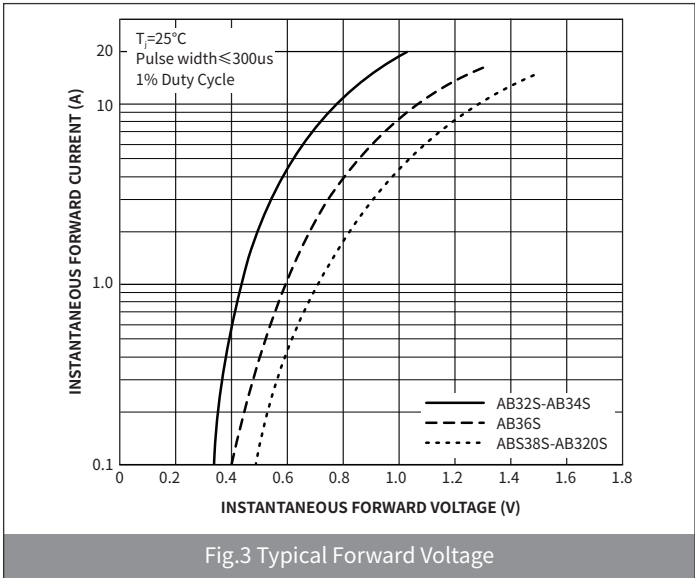
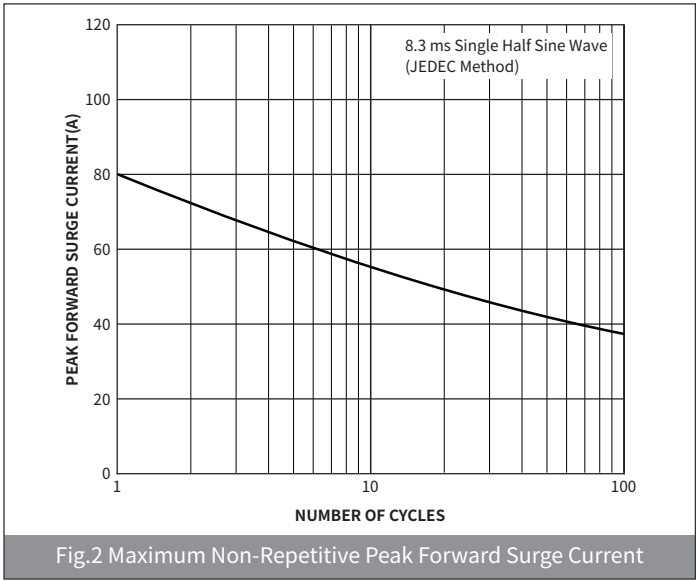
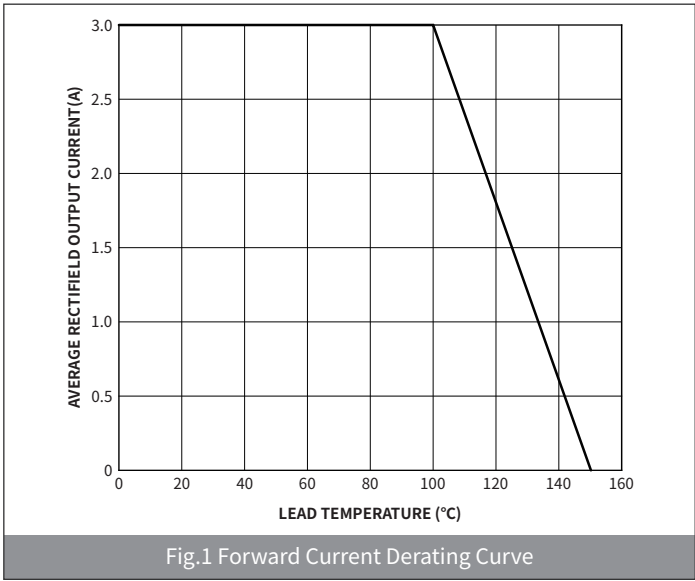
AB32S THRU AB320S

ABS 3.0 AMP Plastic-Encapsulate Bridge Rectifier

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

PARAMETER	TEST CONDITIONS	SYMBOL	UNIT	AB32S	AB34S	AB36S	AB38S	AB310S	AB315S	AB320S
Maximum instantaneous forward voltage	I _F =3.0A	V _F	V	0.55		0.7	0.9			
Maximum DC reverse current at rated DC blocking voltage	V _R =V _{DC} , T _A =25°C	I _{R1}	mA	0.3			0.2		0.1	
	V _R =V _{DC} , T _A =100°C	I _{R2}		10			5		2	
Typical junction capacitance	4.0V DC, 1MHz	C _J	pF	250	160					

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



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ABS 3.0 AMP Plastic-Encapsulate Bridge Rectifier

● Ordering Information

PACKAGE	PACKAGE CODE	REEL(pcs)	BOX(pcs)	CARTON(pcs)	DELIVERY MODE
ABS	R3	5000	10000	100000	13"

● Package Outline Dimensions (ABS)

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	1.25	1.45	0.049	0.057
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	4.8	5.1	0.197	0.201
E	4.2	4.6	0.165	0.181
F	0.3	0.8	0.012	0.031
G	6.2	7.0	0.244	0.275

● 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