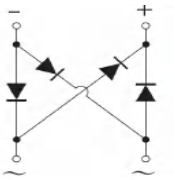
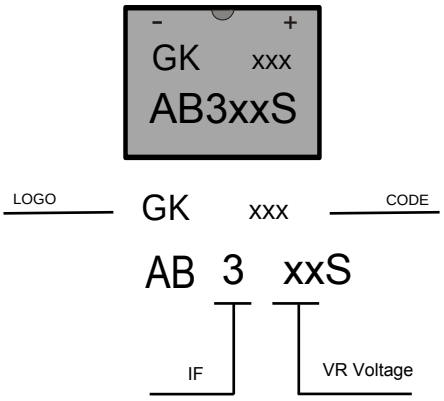
FEATURES

* Ideal for printed circuit board
* Reliable low cost construction utilizing molded plastic technique
* High surge current capability
* Polarity: Symbol molded on body
* Mounting position: Any

VOLTAGE RANGE
20 to 200 Volts
CURRENT
3.0 Ampere



Internal Schematic



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature uniess otherwies specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

TYPE NUMBER	AB32S	AB34S	AB36S	AB38S	AB310S	AB315S	AB320S	UNIT
Maximum Recurrent Peak Reverse Voltage	20	40	60	80	100	150	200	V
Maximum RMS Voltage	14	28	42	56	70	105	140	V
Maximum DC Blocking Voltage	20	40	60	80	100	150	200	V
Maximum Average Forward Rectified Current	3.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	8 0							A
Maximum Forward Voltage Drop per Bridge Element at 3.0A D.C.	0.55		0.7	0.85		0.9		V
Maximum DC Reverse Current Ta=25°C	0.3			0.2		0.1		mA
at Rated DC Blocking Voltage Ta=125°C	10			5		2		mA
Typical Thermal Resistance R JA (Note 1)	75							°C/W
Operating Temperature Range, TJ	-55 —+150							°C
Storage Temperature Range, TSTG	-55 —+150							°C

NOTE 1: Thermal Resistance Junction to Ambient.

RATING AND CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

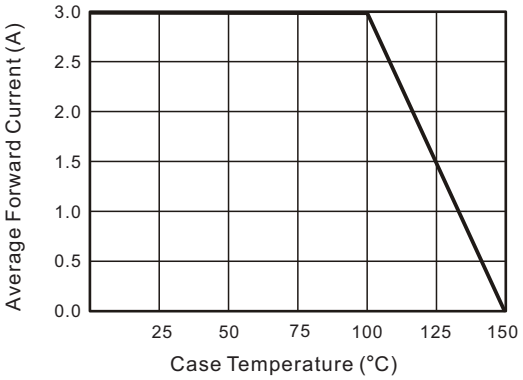


Fig.2 Typical Reverse Characteristics

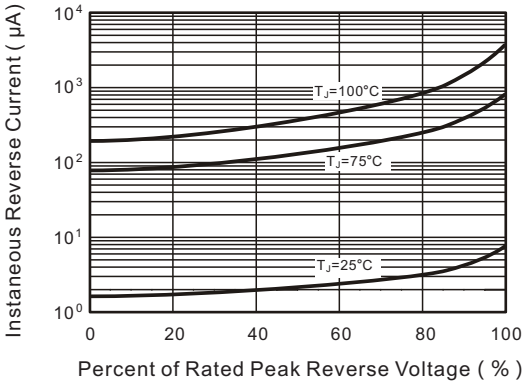


Fig.3 Typical Forward Characteristic

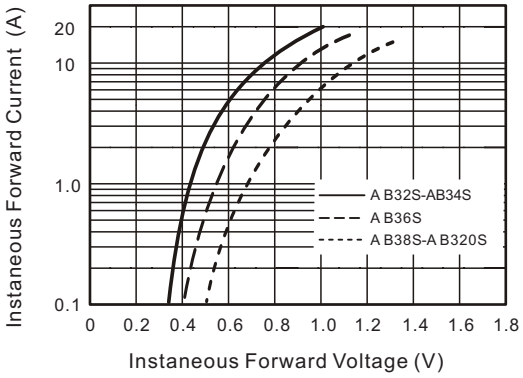


Fig.4 Typical Junction Capacitance

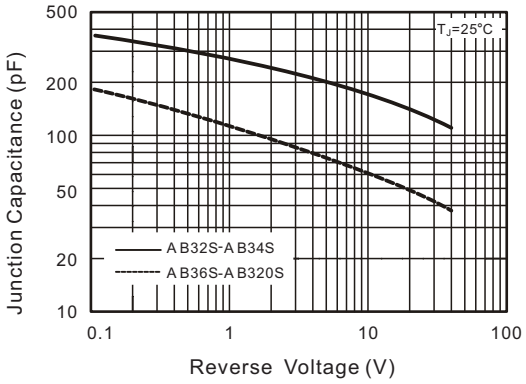


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

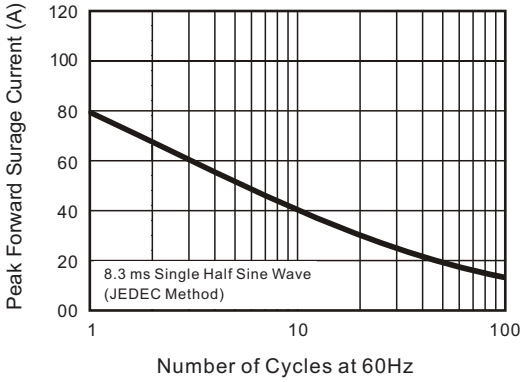
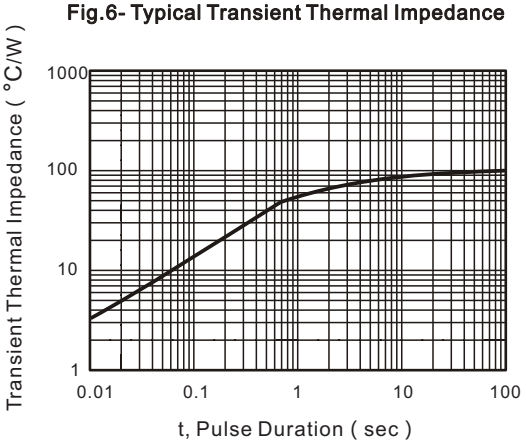


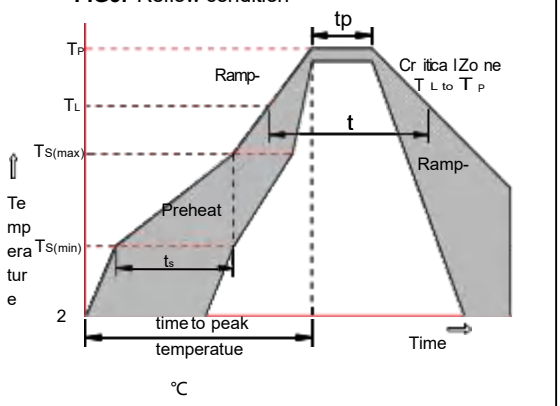
Fig.6- Typical Transient Thermal Impedance



Soldering parameters

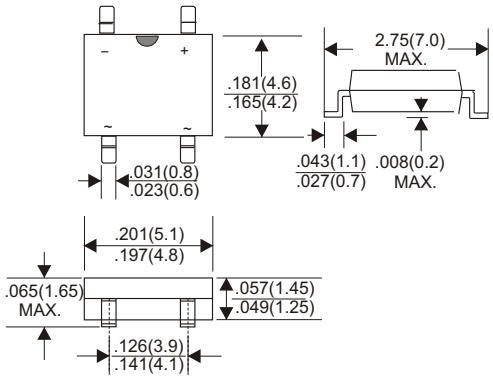
Reflow Condition		Pb-Free assembly (see as bellow)
Pre Heat	-Temperature Min ($T_{s(min)}$)	+150℃
	-Temperature Max($T_{s(max)}$)	+200℃
	-Time (Min to Max) (ts)	60-180 secs.
Average ramp up rate (Liquid us Temp (T_L) to peak)		3℃/sec. Max
$T_{s(max)}$ to T_L - Ramp-up Rate		3℃/sec. Max
Reflow	-Temperature(T_L)(Liquid us)	+217℃
	-Temperature(t_L)	60-150 secs.
Peak Temp (T_p)		+260(+0/-5)℃
Time within 5℃ of actual Peak Temp (t_p)		30 secs. Max
Ramp-down Rate		6℃/sec. Max
Time 25℃ to Peak Temp (T_P)		8 min. Max
Do not exceed		+260℃

FIG5: Reflow condition

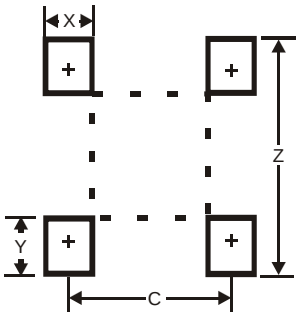


Package Dimensions & Suggested Pad Layout

ABS



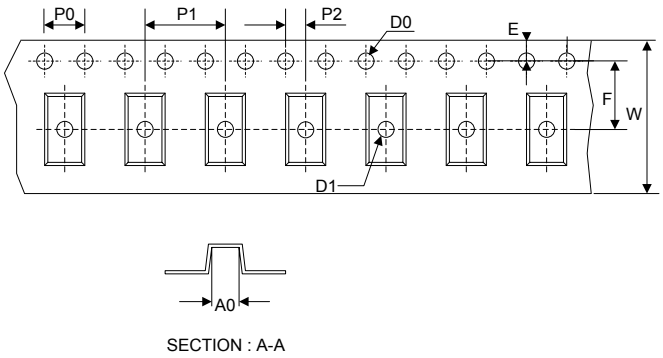
Dimensions in inches and (millimeters)



Dimensions	
Z	8.4
X	1.0
Y	2.2
C	4.0

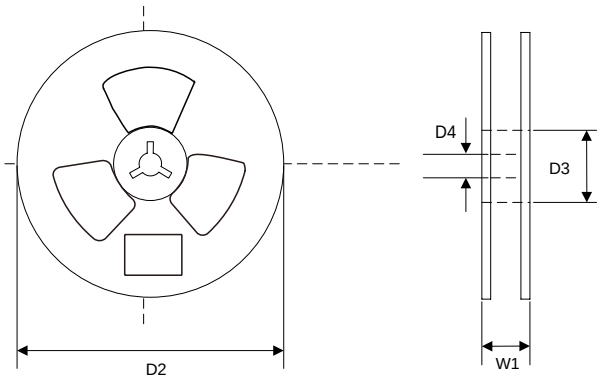
Tape & rell specification

Tape



Symbol	Dimension (mm)
P0	4.00±0.20
P1	8.00±0.20
P2	2.00±0.20
D0	1.60±0.15
D1	1.60±0.15
E	1.75±0.20
F	5.50±0.15
W	12.00±0.20
A0	5.30±0.20
B0	6.80±0.20
K0	1.65±0.15
T	0.23±0.10

13” Reel



D2	330.0±5.0
D3	73Min.
D4	16.0±2.5
W1	18.0±3.0
Quantity: 5000PCS	