

## ABS1506 THRU ABS1510

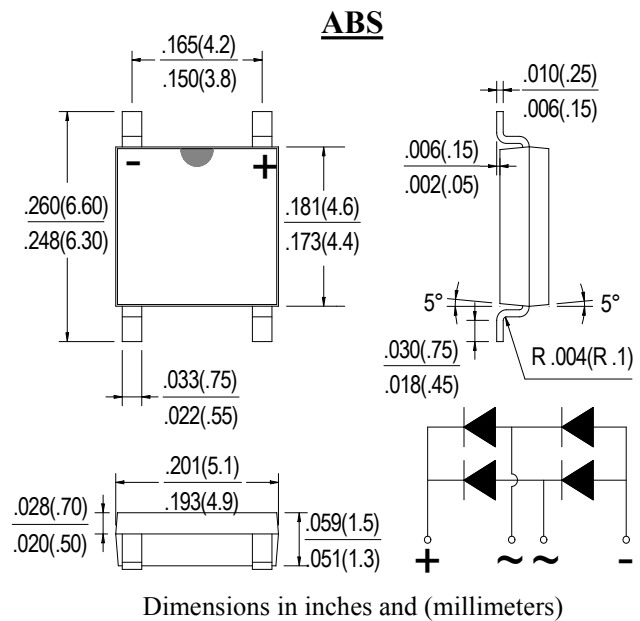
### SINGLE PHASE 1.5AMPS. GLASS PASSIVATED BRIDGE RECTIFIERS

#### FEATURE

- . Glass passivated junction.
- . Ideal for printed circuit board.
- . Reliable low cost construction utilizing molded plastic technique.
- . High surge current capability.
- . High temperature soldering guaranteed: 260°C/10 seconds at terminals.
- . UL Recognized File # E338195.

#### MECHANICAL DATA

- . Case Material: "Green" Molding compound, UL flammability classification rating 94V-0, "Free halogen"
- . Moisture sensitivity level: level 2a, per J-STD-020
- . Polarity: Polarity as marked on the body
- . Weight: 0.10g (approximately)



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.  
Single phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%

Type Number	SYM BOL	ABS 1506	ABS 1508	ABS 1510	units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	420	560	700	V
Maximum DC blocking Voltage	$V_{DC}$	600	800	1000	V
Maximum Average Forward rectified Current	$I_{F(AV)}$	1.5			A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	$I_{FSM}$	40			A
Maximum Instantaneous Forward Voltage @ $I_F = 1.5A$ DC @ $I_F = 0.6A$ DC	$V_F$	1.1 0.95			V
Maximum DC Reverse Current @ $T_J = 25^\circ C$ at rated DC blocking voltage @ $T_J = 125^\circ C$	$I_R$	5.0 100.0			$\mu A$
$I^2t$ Rating for Fusing ( $t < 8.3ms$ )	$I^2t$	6.6			$A^2Sec$
Typical Junction Capacitance Per Leg (Note1)	$C_J$	13			pF
Typical Thermal Resistance (Note2)	$R_{JC}$	22			$^\circ C / W$
	$R_{JA}$	65			
Storage Temperature	$T_{STG}$	-55 to +150			$^\circ C$
Operating Junction Temperature	$T_J$	-55 to +150			$^\circ C$

#### Note:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Thermal resistance junction to case, lead and ambient in accordance with JESD-51.  
Unit mounted on glass-epoxy substrate with 1oz/ft<sup>2</sup> 15x15 mm copper pad per pin with heatsink

**RATING AND CHARACTERISTIC CURVES ( ABS1506 THRU ABS1510 )**

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

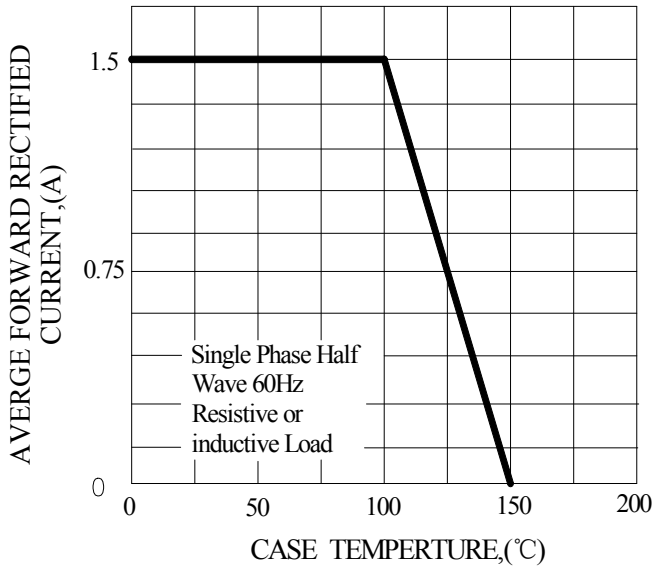


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

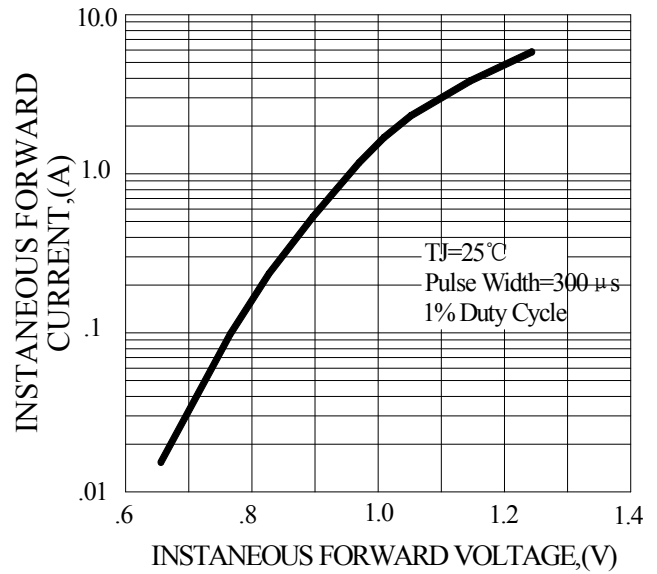


FIG.3-MAXIMUN NON-REPETITIVE FORWARD SURGE CURRENT

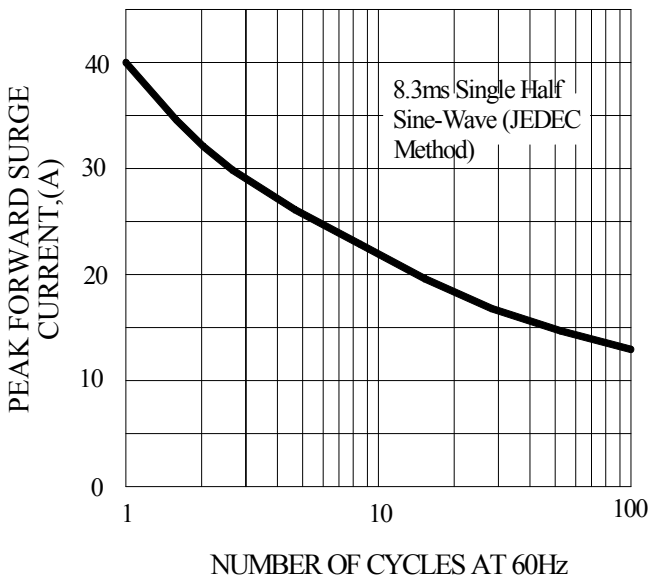
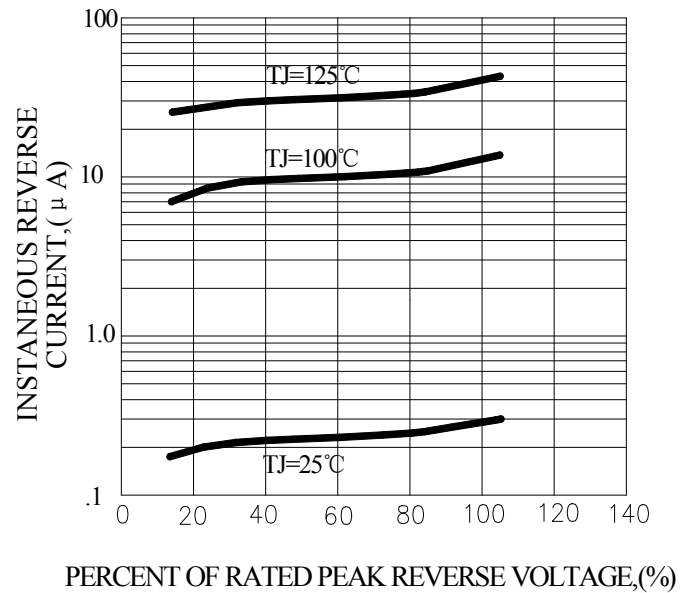
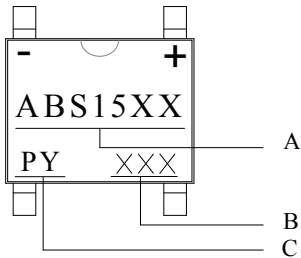


FIG.4-TYPICAL REVERSE CHARACTERISTICS



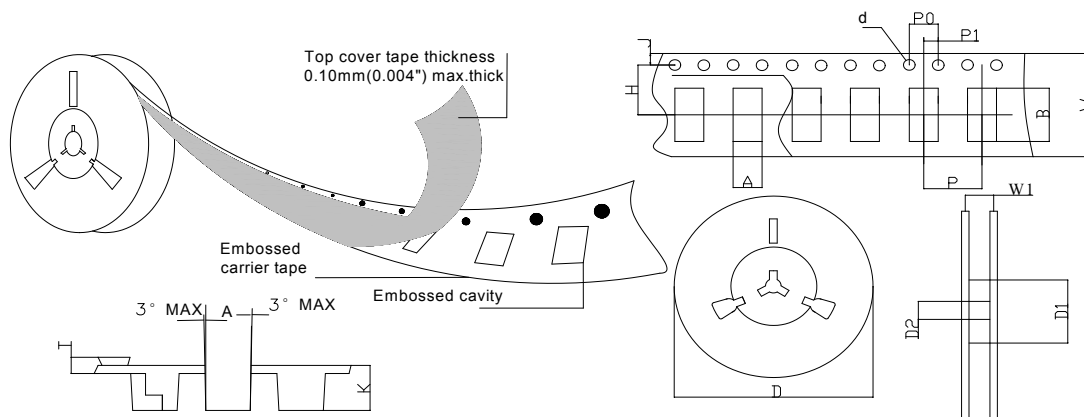
## Marking and packaging illustration

### 1、Marking



SYMBOL	Explanation
A	Product Name
B	Date Code
C	Trademark

### 2、Packaging



SPECIFICATIONS mm(inch)		PACKAGE
SYMBOL	ITEM	ABS
	Carrier width	A
	Carrier length	B
	Sprocket hole	d
	Reel outer diameter	D
	Reel inner diameter	D1
	Feed hole diameter	D2
	Sprocket hole position	J
	Punch hole position	H
	Carrier depth	K
	Punch hole pitch	P
	Sprocket hole pitch	P0
	Embossment center	P1
	Overall tape thickness	T
	Tape width	W
	Reel width	W1