

### FAST RECOVERY RECTIFIERS

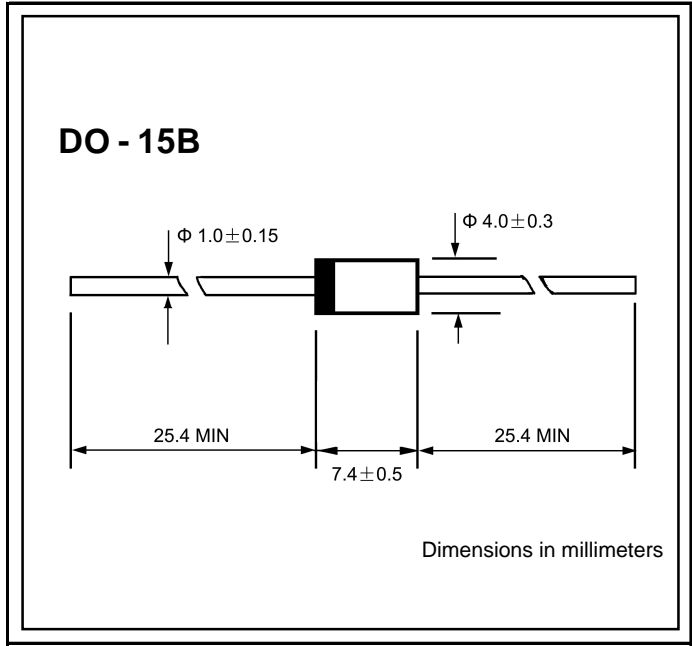
VOLTAGE RANGE: 200---600 V  
CURRENT: 2.0 A

#### FEATURES

- ◇ Low cost
- ◇ Diffused junction
- ◇ Low leakage
- ◇ Low forward voltage drop
- ◇ High current capability
- ◇ Easily cleaned with Freon,Alcohol,Isopropanol and similar solvents
- ◇ The plastic material carries U/L recognition 94V-0

#### MECHANICAL DATA

- ◇ Case:JEDEC DO-15B,molded plastic
- ◇ Terminals: Axial lead ,solderable per MIL- STD-202,Method 208
- ◇ Polarity: Color band denotes cathode
- ◇ Weight: 0.024ounces,0.68 grams
- ◇ Mounting position: Any



#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase,half wave,60 Hz,resistive or inductive load. For capacitive load,derate by 20%.

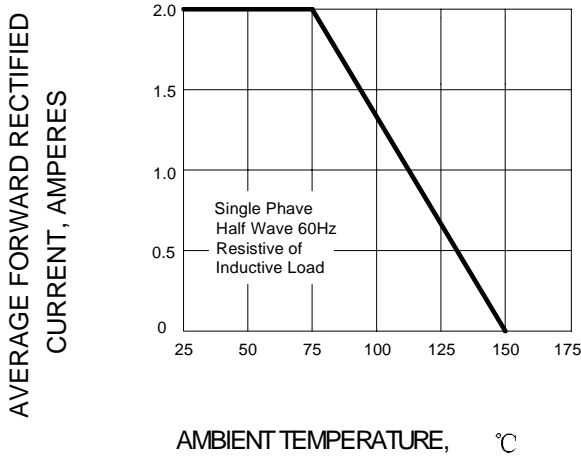
		BYW 32	BYW 33	BYW 34	BYW 35	BYW 36	UNITS
Maximum recurrent peak reverse voltage	$V_{RRM}$	200	300	400	500	600	V
Maximum RMS voltage	$V_{RMS}$	140	210	280	350	420	V
Maximum DC blocking voltage	$V_{DC}$	200	300	400	500	600	V
Maximum average forward rectified current 9.5mm lead length, @ $T_A=75^\circ C$	$I_{F(AV)}$	2.0					A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load @ $T_J=125^\circ C$	$I_{FSM}$	40.0					A
Maximum instantaneous forward voltage @ 2.0 A	$V_F$	1.2					V
Maximum reverse current @ $T_A=25^\circ C$ at rated DC blocking voltage @ $T_A=150^\circ C$	$I_R$	5.0 50.0					$\mu A$
Maximum reverse recovery time (Note1)	$t_{rr}$	200					ns
Typical junction capacitance (Note2)	$C_J$	22					pF
Typical thermal resistance (Note3)	$R_{\theta JA}$	35					$^\circ C/W$
Operating junction temperature range	$T_J$	- 55---- +150					$^\circ C$
Storage temperature range	$T_{STG}$	- 55---- +150					$^\circ C$

NOTE: 1. Measured with  $I_F=0.5A$ ,  $I_R=1A$ ,  $I_{rr}=0.25A$ .

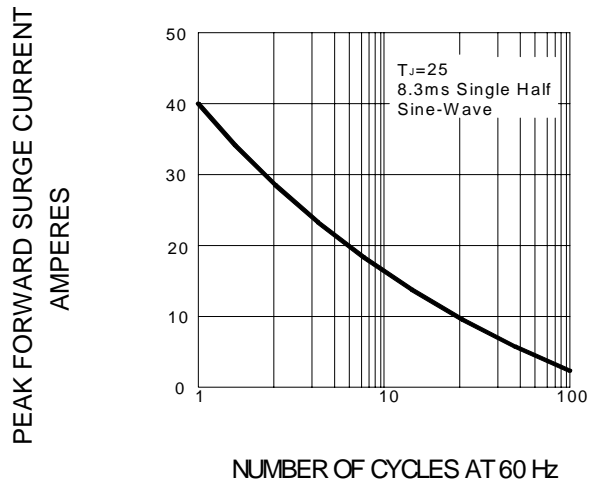
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

3. Thermal resistance from junction to ambient.

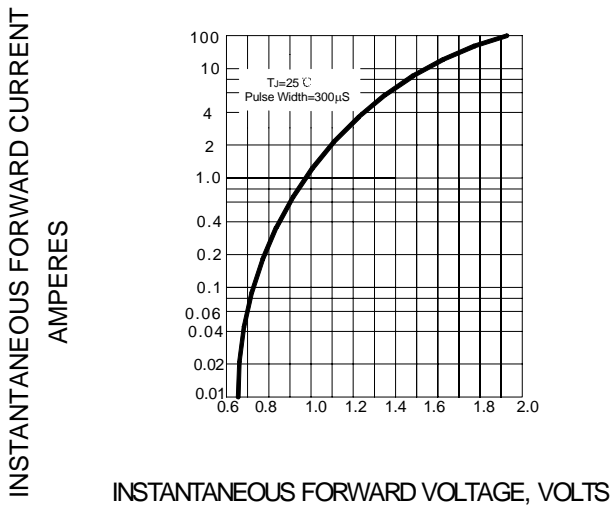
**FIG.1 -FORWARD DERATING CURVE**



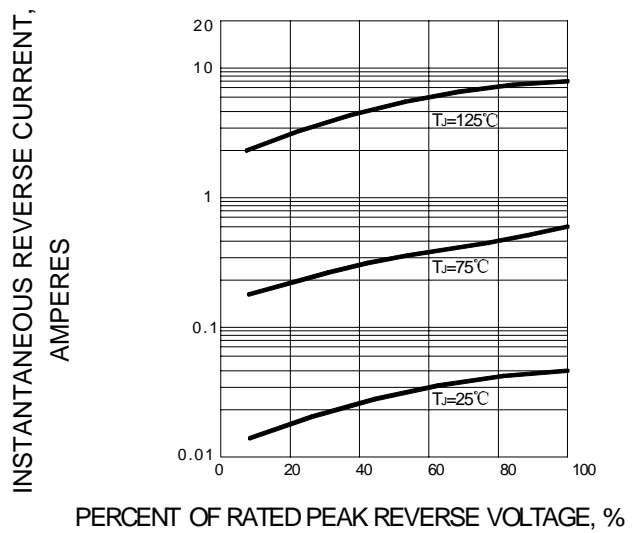
**FIG.2 -PEAK FORWARD SURGE CURRENT**



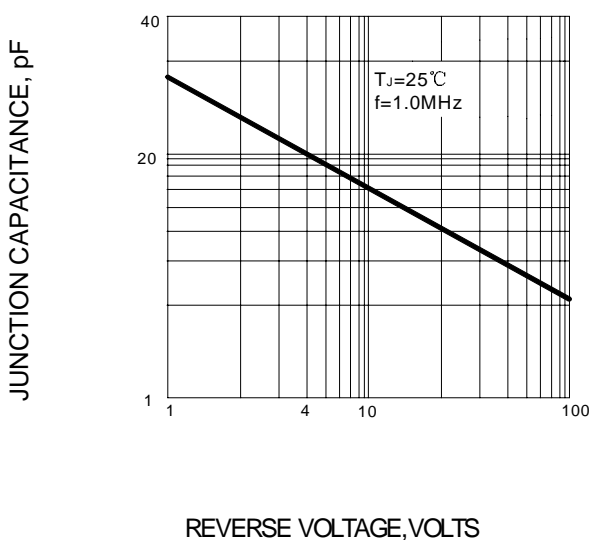
**FIG.3 -TYPICAL FORWARD CHARACTERISTICS**



**FIG.4-TYPICAL REVERSE CHARACTERISTICS**



**FIG.5- TYPICAL JUNCTION CAPACITANCE**



**FIG.6- TYPICAL RECTIFICATION EFFICIENCY**

