FAST RECOVERY RECTIFIER

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

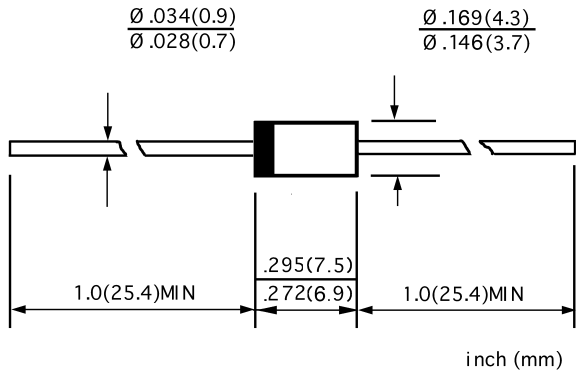
FEATURES

- ◇ 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-15L,molded plastic
- ◇ Terminals: Axial lead ,solderable per MIL- STD-202,Method 208
- ◇ Polarity: Color band denotes cathode
- ◇ Weight: 0.024 ounces,0.068 grams
- ◇ Mounting position: Any

DO - 15L



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ 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 forw ard rectified current 9.5mm lead length, @T_A=75℃	$I_{F(AV)}$	2.0					A
Peak forw ard surge current 8.3ms single half-sine-w ave superimposed on rated load @T_J=125℃	I_{FSM}	40.0					A
Maximum instantaneous forw ard voltage @ 2.0 A	V_F	1.2					V
Maximum reverse current @T_A=25℃	I_R	5.0					μA
at rated DC blocking voltage @T_A=150℃		50.0					
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					℃/W
Operating junction temperature range	T_J	- 55---- +150					℃
Storage temperature range	T_{STG}	- 55---- +150					℃

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

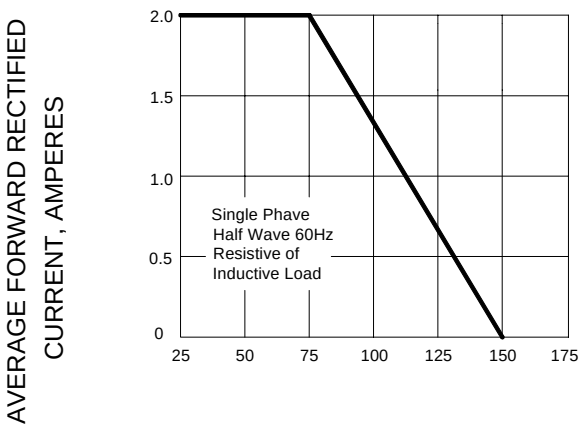


FIG.2 –PEAK FORWARD SURGE CURRENT

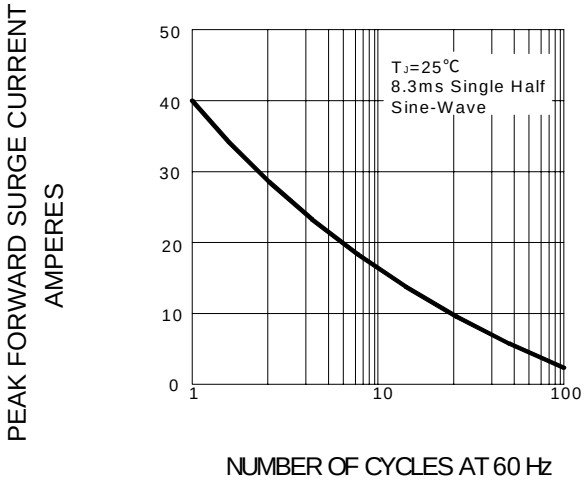


FIG.3 –TYPICAL FORWARD CHARACTERISTICS

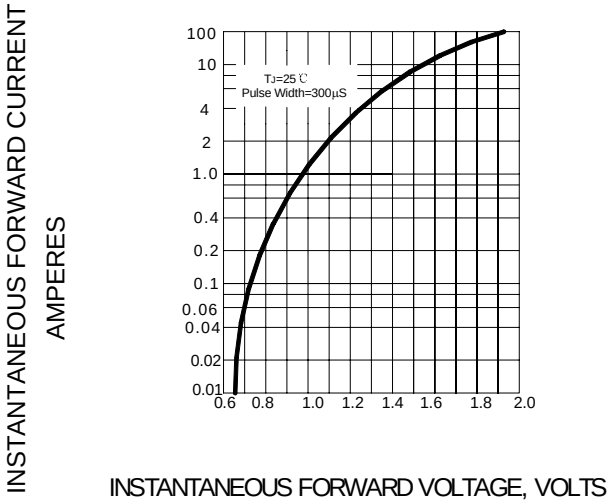


FIG.4–TYPICAL REVERSE CHARACTERISTICS

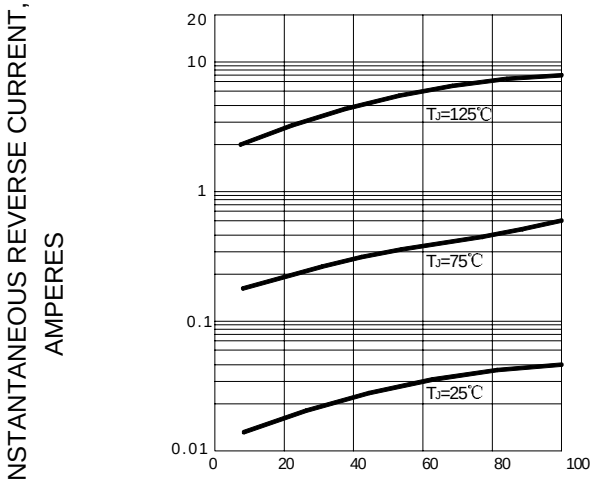


FIG.5– TYPICAL JUNCTION CAPACITANCE

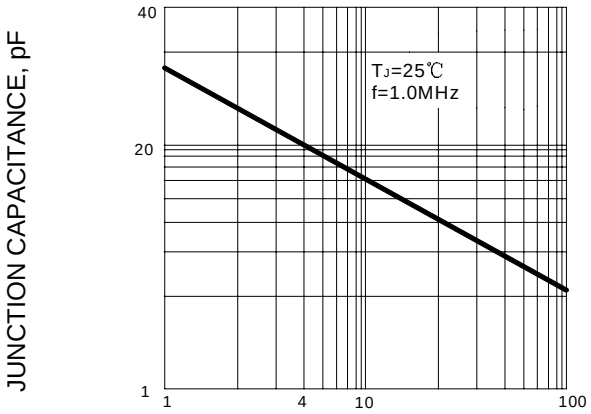


FIG.6– TYPICAL RECTIFICATION EFFICIENCY