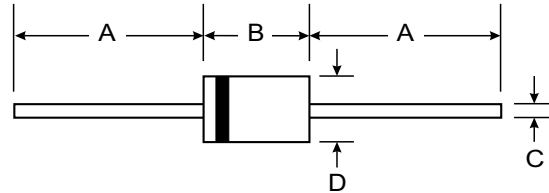


Features

- 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-15, 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-15		
Dim	Min	Max
A	25.40	—
B	5.50	7.62
C	0.686	0.889
D	2.60	3.60
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics @ T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current 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°C	I _{F(AV)}	2.0					A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load @ T _J =125°C	I _{FSM}	40.0					A
Maximum instantaneous forward voltage @ 2.0 A	V _F	1.2					V
Maximum reverse current @ T _A =25°C at rated DC blocking voltage @ T _A =150°C	I _R	5.0 50.0					μA
Maximum reverse recovery time (Note1)	t _{rr}	200					ns
Typical junction capacitance (Note2)	C _J	22					pF
Typical thermal resistance (Note3)	R _{θJA}	35					°C/W
Operating junction temperature range	T _J	- 55---- +150					°C
Storage temperature range	T _{STG}	- 55---- +150					°C

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

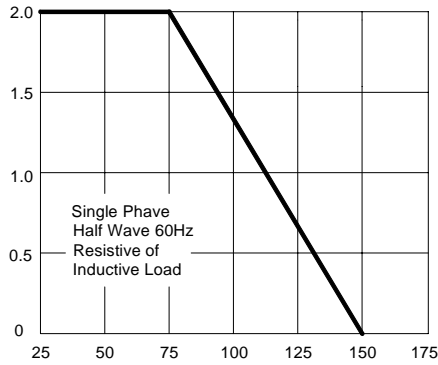
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

3. Thermal resistance from junction to ambient.



FIG.1 –FORWARD DERATING CURVE

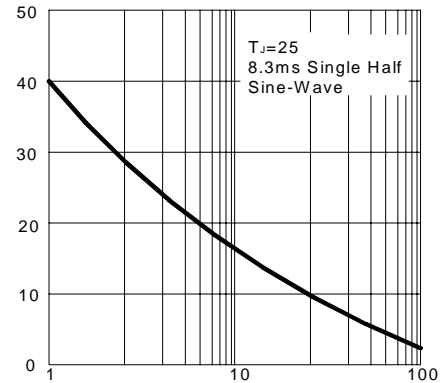
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES



AMBIENT TEMPERATURE, °C

FIG.2 –PEAK FORWARD SURGE CURRENT

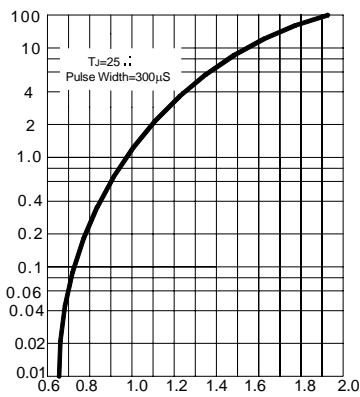
PEAK FORWARD SURGE CURRENT AMPERES



NUMBER OF CYCLES AT 60 Hz

FIG.3 –TYPICAL FORWARD CHARACTERISTICS

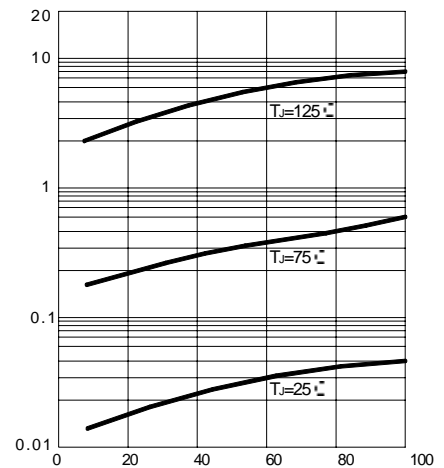
INSTANTANEOUS FORWARD CURRENT AMPERES



INSTANTANEOUS FORWARD VOLTAGE, VOLTS

FIG.4–TYPICAL REVERSE CHARACTERISTICS

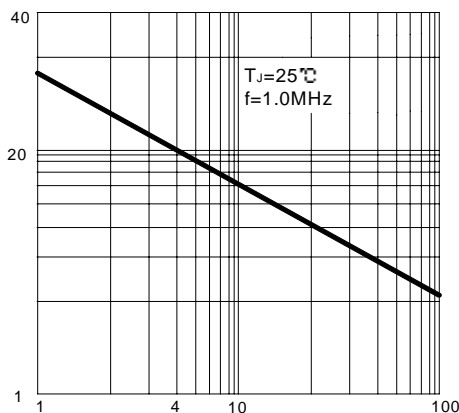
INSTANTANEOUS REVERSE CURRENT, AMPERES



PERCENT OF RATED PEAK REVERSE VOLTAGE, %

FIG.5– TYPICAL JUNCTION CAPACITANCE

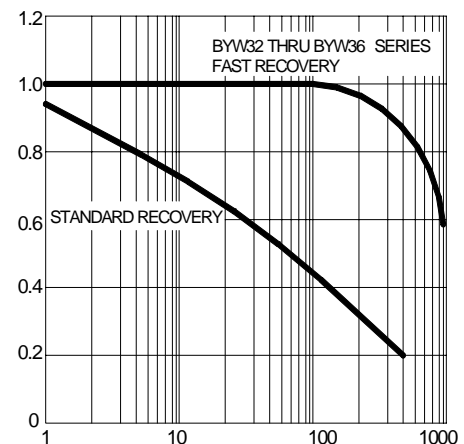
JUNCTION CAPACITANCE, pF



REVERSE VOLTAGE, VOLTS

FIG.6– TYPICAL RECTIFICATION EFFICIENCY

RECTIFICATION EFFICIENCY



FREQUENCY, KHz