

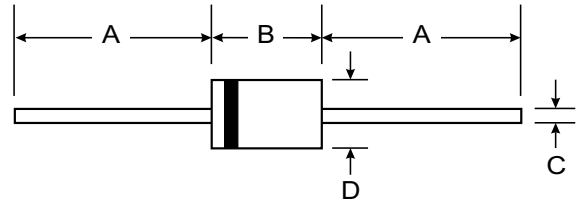
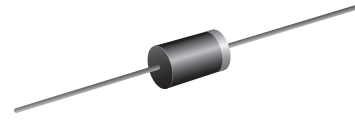
VOLTAGE RANGE: 200 - 1000V
CURRENT: 1.6A

Features

- Low leakage
- Low forward voltage drop
- High current capability
- Easily cleaned with Freon, Alcohol, Isopropanol and similar solvents

Mechanical Data

- Case : DO-15, Molded plastic
- Epoxy : UL94V-O rate flame retardant
- Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- Polarity : Color band denotes cathode end
- Mounting position : Any
- Weight : 0.465 gram



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%.

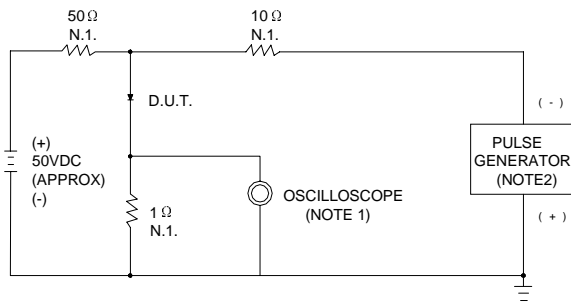
Characteristic	Symbol	BYV36A	BYV36B	BYV36C	BYV36D	BYV36E	
Maximum recurrent peak reverse voltage	V_{RRM}	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	200	200	600	800	1000	V
Maximum average forward rectified current 9.5mm lead length, @T _A =75°C	$I_{F(AV)}$	1.6					A
Peak forward surge current 10ms single half-sine-wave superimposed on rated load @T _J =125°C	I_{FSM}	30.0					A
Maximum instantaneous forward voltage @ 1.0A	V_F	1.35			1.45		V
Maximum reverse current @T _A =25°C at rated DC blocking voltage @T _A =100°C	I_R	5.0 100.0					μA
Maximum reverse recovery time (Note1)	t_{rr}	100			150		ns
Typical junction capacitance (Note2)	C_J	18					pF
Typical thermal resistance (Note3)	$R_{\theta JA}$	45					°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 – REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



NOTES: 1. RISE TIME=7ns MAX. INPUT IMPEDANCE=1MΩ. 22pF
 2. RISE TIME=10ns MAX. SOURCE IMPEDANCE=50Ω

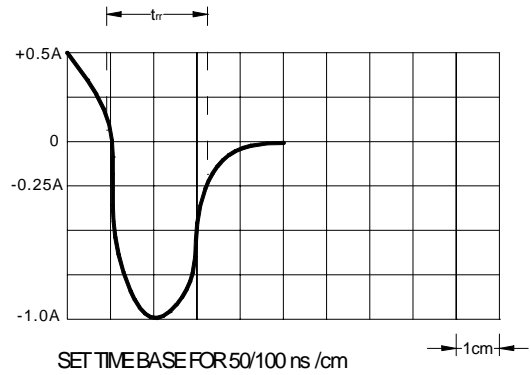
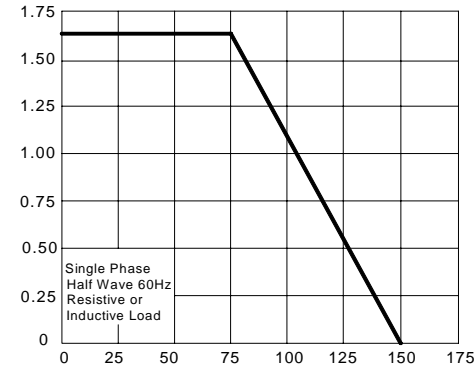


FIG.2 – FORWARD DERATING CURVE

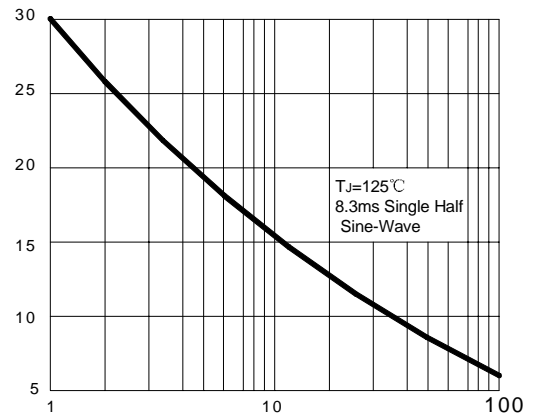
AVERAGE FORWARD CURRENT
AMPERES



AMBIENT TEMPERATURE, °C

FIG.3 – PEAK FORWARD SURGE CURRENT

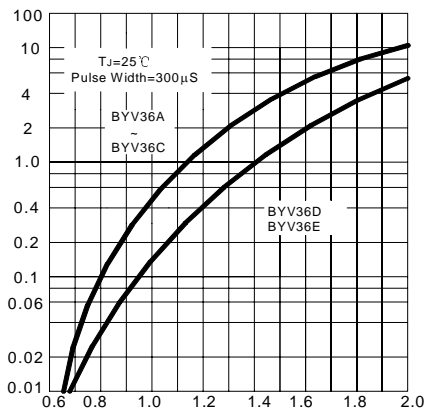
PEAK FORWARD SURGE CURRENT
AMPERES



NUMBER OF CYCLES AT 60 Hz

FIG.4 – TYPICAL FORWARD CHARACTERISTIC

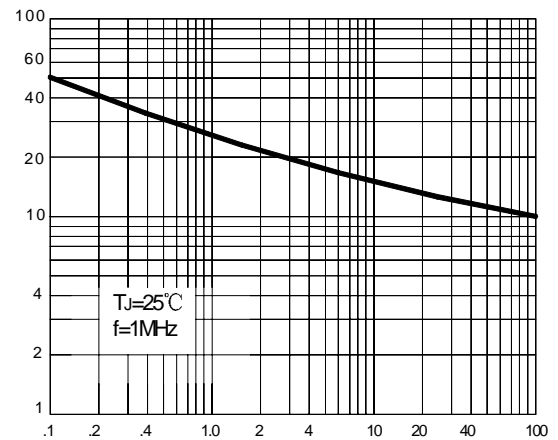
INSTANTANEOUS FORWARD CURRENT
AMPERES



INSTANTANEOUS FORWARD VOLTAGE, VOLTS

FIG.4 – TYPICAL JUNCTION CAPACITANCE

JUNCTION CAPACITANCE, pF



REVERSE VOLTAGE, VOLTS