

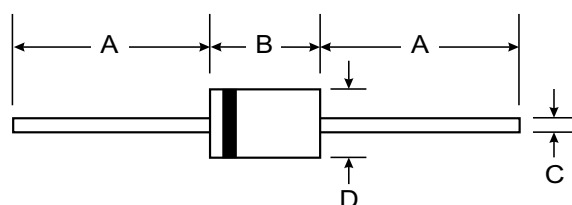
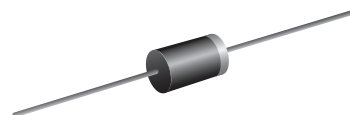
VOLTAGE RANGE: 50 - 1000V
CURRENT: 1.4 A

Features

- Diffused junction
- 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%.

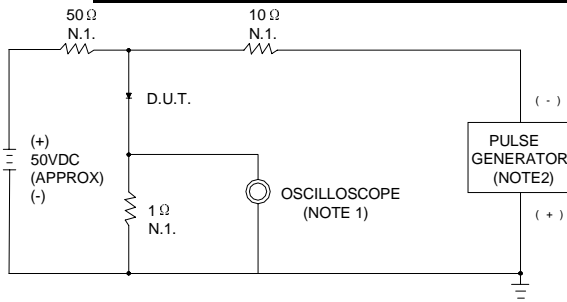
Characteristic	Symbol	BYT52A	BYT52B	BYT52D	BYT52G	BYT52J	BYT52K	BYT52M	Unit
Maximum recurrent peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	50	10	200	400	600	800	1000	V
Maximum average forward rectified current 9.5mm lead length, @T _A =75°C	I _{F(AV)}	1.4							A
Peak forward surge current 10ms single half-sine-wave superimposed on rated load @T _J =125°C	I _{FSM}	50.0							A
Maximum instantaneous forward voltage @ 1.0A	V _F	1.3							V
Maximum reverse current at rated DC blocking voltage @T _A =25°C @T _A =100°C	I _R	5.0 100.0							μA
Maximum reverse recovery time (Note1)	t _{rr}	200							ns
Typical junction capacitance (Note2)	C _J	18							pF
Typical thermal resistance (Note3)	R _{qJA}	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

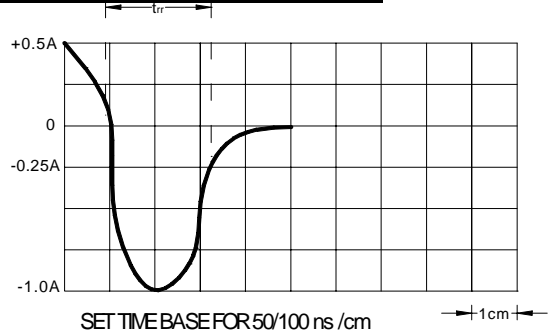


FIG.2 – FORWARD DERATING CURVE

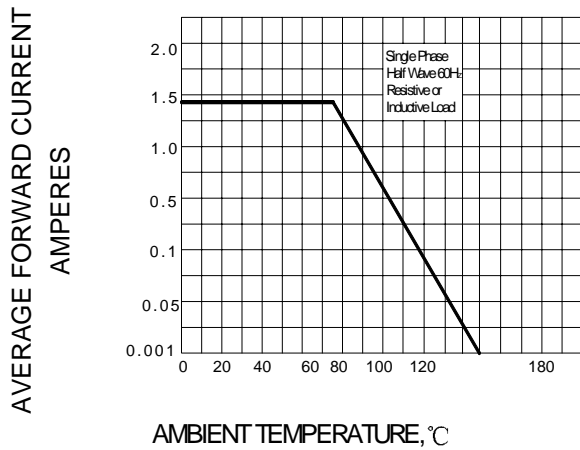


FIG.3 – PEAK FORWARD SURGE CURRENT

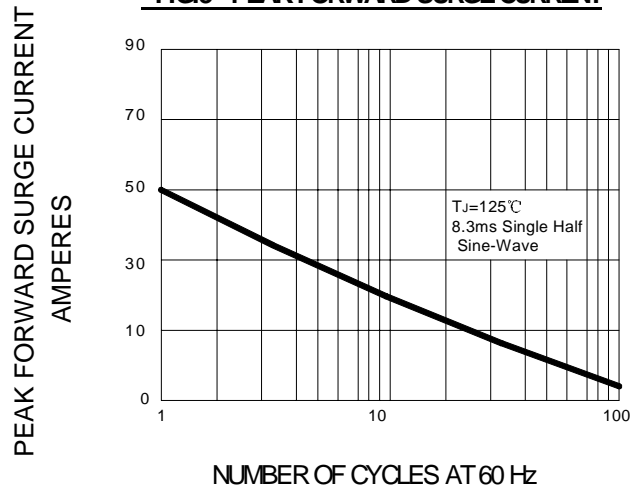


FIG.4 – TYPICAL FORWARD CHARACTERISTIC

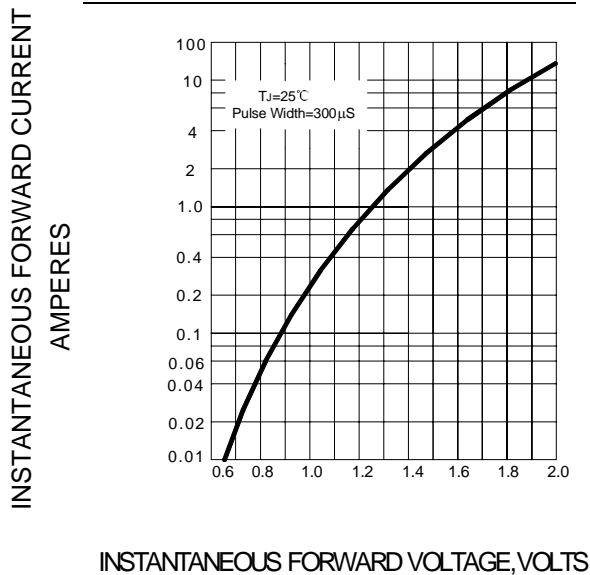


FIG.5 – TYPICAL JUNCTION CAPACITANCE

