

VOLTAGE RANGE: 50 - 600 V

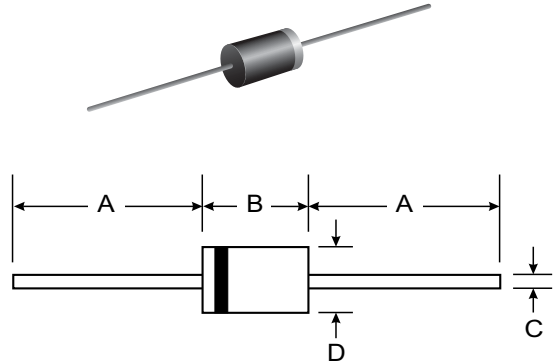
CURRENT: 3.5 - 3.0 A

Features

- Low cost
- Diffused junction
- Low leakage
- Low forward voltage drop
- High current capability
- Easily cleaned with alcohol, Isopropanol and similar solvents

Mechanical Data

- Case: DO-201AD, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 1.2 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



DO-201AD		
Dim	Min	Max
A	25.40	—
B	7.20	9.50
C	1.20	1.30
D	4.80	5.30
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise specified

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

Characteristic	Symbol	BYV28 -50	BYV28 -100	BYV28 -150	BYV28 -200	BYV28 -300	BYV28 -400	BYV28 -600	Unit
Maximum recurrent peak reverse voltage	V _{RRM}	50	100	150	200	300	400	600	V
Maximum RMS voltage	V _{RMS}	35	70	105	140	210	280	420	V
Maximum DC blocking voltage	V _{DC}	50	100	150	200	300	400	600	V
Maximum average forward rectified current 9.5mm lead length, @T _A =75℃	I _{F(AV)}	3.5						3.0	A
Peak forward surge current 10ms single half-sine-wave superimposed on rated load @T _J =125℃	I _{FSM}	90.0							A
Maximum instantaneous forward voltage @ I _F =I _{F(AV)}	V _F	1.02				1.05		1.25	V
Maximum reverse current @T _A =25℃ at rated DC blocking voltage @T _A =100℃	I _R	5.0 100.0							μ A
Maximum reverse recovery time (Note1)	t _{rr}	25				50			ns
Typical junction capacitance (Note2)	C _J	100							pF
Typical thermal resistance (Note3)	R _{θJA}	75							℃/W
Operating junction temperature range	T _J	- 55 ----- + 150							℃
Storage temperature range	T _{STG}	- 55 ----- + 150							℃

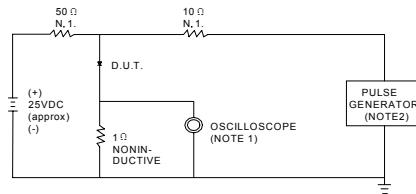
NOTE: 1. Measured with $I_F = 0.5\text{A}$, $I_R = 1\text{A}$, $t_{rr} = 0.25\text{A}$.

2. Measured at 1.0MHz and applied reverse voltage of 4.1V DC.

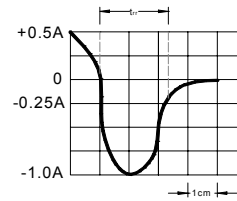
3. Thermal resistance from junction to ambient.

Ratings AND Characteristic Curves BYV28-50--BYV28-600

FIG.1 – TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



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



SET TIME BASE FOR 10 ns/cm

FIG.2 – TYPICAL FORWARD CHARACTERISTIC

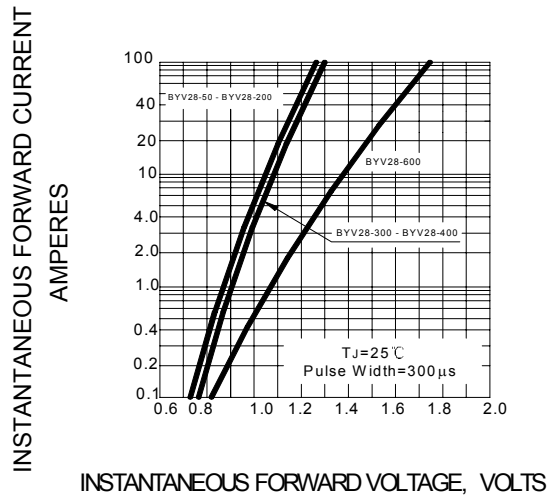


FIG.3 – FORWARD DERATING CURVE

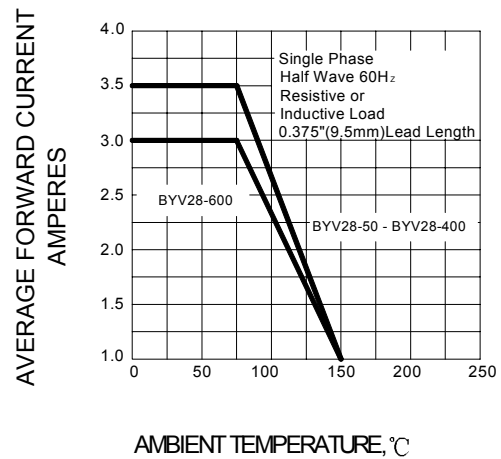


FIG.4 – TYPICAL JUNCTION CAPACITANCE

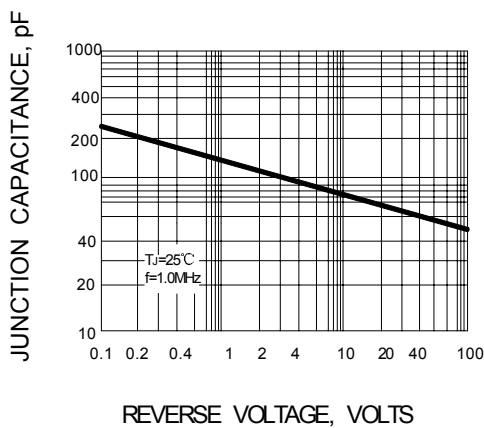


FIG.5- PEAK FORWARD SURGE CURRENT

