

SUPER FAST RECTIFIER

Reverse Voltage - 600 V

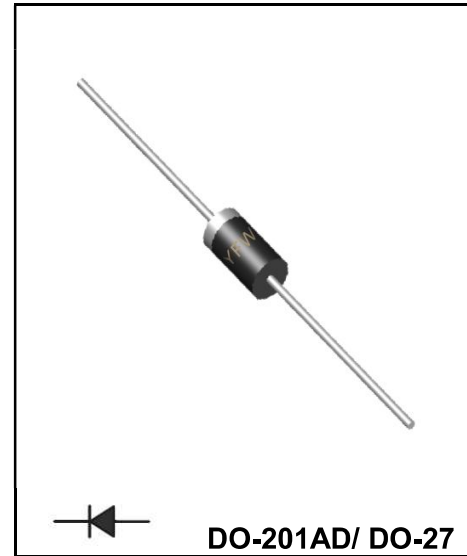
Forward Current - 8 A

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-O

MECHANICAL DATA

- ◆Case: DO-201AD/ DO-27
- ◆Terminals: Solderable per MIL-STD-750, Method 2026



Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	Value	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	600	V
Maximum RMS voltage	V_{RMS}	420	V
Maximum DC Blocking Voltage	V_{DC}	600	V
Maximum Average Forward Rectified Current at $T_A = 75\text{ }^{\circ}\text{C}$	$I_{(AV)}$	8.0	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	250	A
Maximum Instantaneous Forward Voltage at 8.0A	V_F	1.75	V
Maximum DC Reverse Current $T_a = 25\text{ }^{\circ}\text{C}$ at Rated DC Blocking Voltage $T_a = 100\text{ }^{\circ}\text{C}$	I_R	10 100	μA
Maximum Reverse recovery time(Note 3)	T_{RR}	35	ns
Typical Junction Capacitance (Note 1)	C_j	150	pF
Typical Thermal Resistance(Note 2)	$R_{\theta JA}$	30	$^{\circ}\text{C/W}$
Operating junction temperature range	T_j	-55 ~ +155	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	-55 ~ +155	$^{\circ}\text{C}$

NOTE:

1. Measured at 1.0MHZ and applied reverse voltage of 4.0V DC.
2. Thermal Resistance Junction to Ambient.
3. Reverse recovery condition $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{rr}=0.25\text{A}$.

FIG.1-TYPICAL FORWARD CHARACTERISTIC

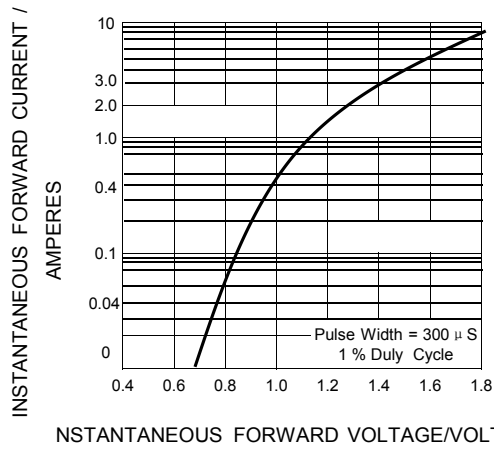


FIG.2-TYPICAL JUNCTION CAPACITANCE

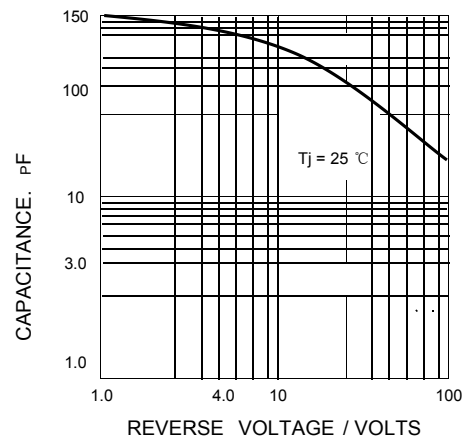


FIG.3 - FORWARD CURRENT DERATING CURVE

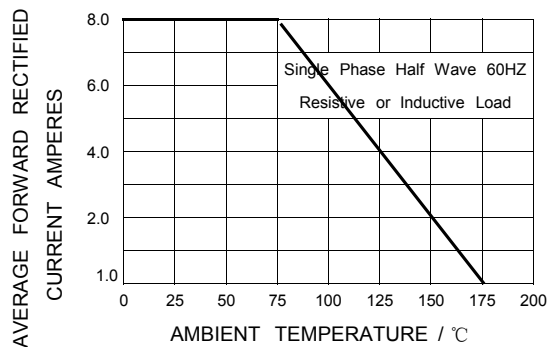


FIG.4-PEAK FORWARD SURGE CURRENT

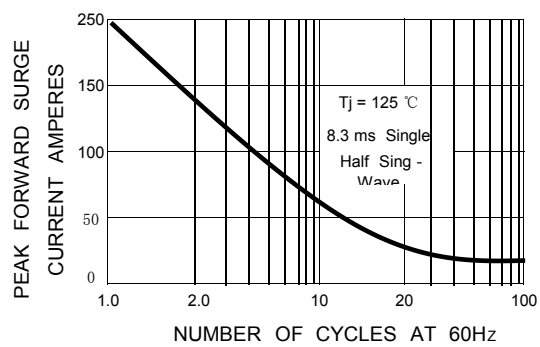
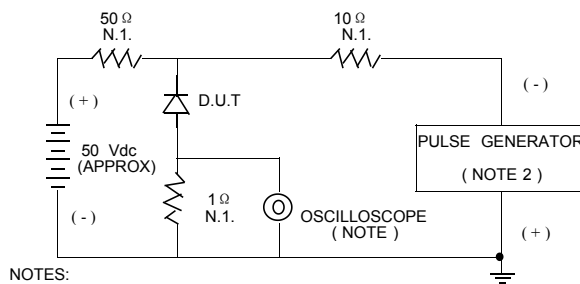
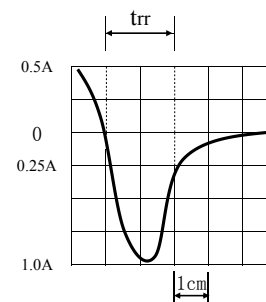


FIG.5 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



NOTES:

1. RISE TIME = 7n SEC MAX. INPUT IMPEDANCE = 1 MEGOHM
2. RISE TIME = 10n SEC MAX. SOURCE IMPEDANCE = 50 OHM



SET TIME BASE FOR 25 / 35 ns / cm

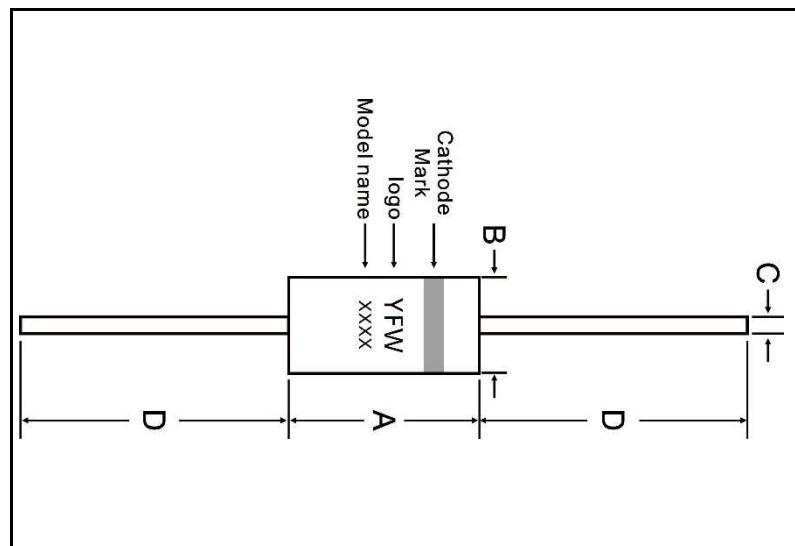
Ordering information

Package	Packing Description	Packing Quantity
DO-201AD/DO-27	bulk	250PCS/500PCS/Inner Box 12500PCS/Carton
	ammo pack	1000PCS/1250PCS/Inner Box 10000PCS/12500PCS/Carton

Package Dimensions

DO-201AD/DO-27

Dim.	Millimeter(mm)		INCHES	
	Min.	Max.	Min.	Max.
A	9.20	9.50	0.362	0.374
B	5.2	5.7	0.205	0.224
C	1.20	1.30	0.048	0.052
D	24.3	26	0.957	1.02



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