**VOLTAGE RANGE: 100 - 200V**
CURRENT: 3.0 A

Features

- High current capability
- High surge current capability
- High reliability
- Low reverse current
- Low forward voltage drop
- Fast switching for high efficiency

Mechanical Data

- Case : DO-201AD 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 : 1.16 grams

RoHS COMPLIANT
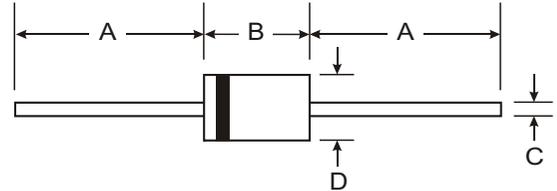
DO-201AD		
Dim	**Min**	**Max**
A	25.40	—
B	8.50	9.53
C	0.96	1.06
D	4.80	5.21
All Dimensions in mm		

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	30DF1	30DF2	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	200	V
Maximum RMS Voltage	V_{RMS}	70	140	V
Maximum DC Blocking Voltage	V_{DC}	100	200	V
Maximum Average Forward Current 0.375"(9.5mm) Lead Length Ta = 55 °C	$I_{F(AV)}$	3.0		A
Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	I_{FSM}	200		A
Maximum Peak Forward Voltage at I_F = 3 A	V_F	1.0		V
Maximum DC Reverse Current Ta = 25 °C	I_R	10		μA
at Rated DC Blocking Voltage Ta = 100 °C	$I_{R(H)}$	200		μA
Maximum Reverse Recovery Time (Note 1)	T_{rr}	200		ns
Typical Junction Capacitance (Note 2)	C_J	32		pf
Junction Temperature Range	T_J	- 65 to + 150		°C
Storage Temperature Range	T_{STG}	- 65 to + 150		°C

Notes :

(1) Reverse Recovery Test Conditions : I_F = 0.5 A, I_R = 1.0 A, Irr = 0.25 A.

(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 V_{DC}

www.sunmate.tw

RATING AND CHARACTERISTIC CURVES 30DF1 - 30DF2

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

NOTES : 1. Rise Time = 7 ns max., Input Impedance = 1 megaohm, 22 pF.
2. Rise time = 10 ns max., Source Impedance = 50 ohms.
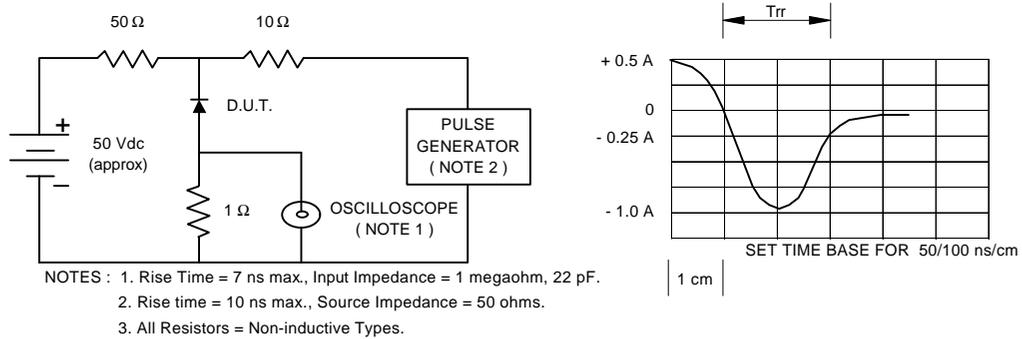3. All Resistors = Non-inductive Types.

FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT
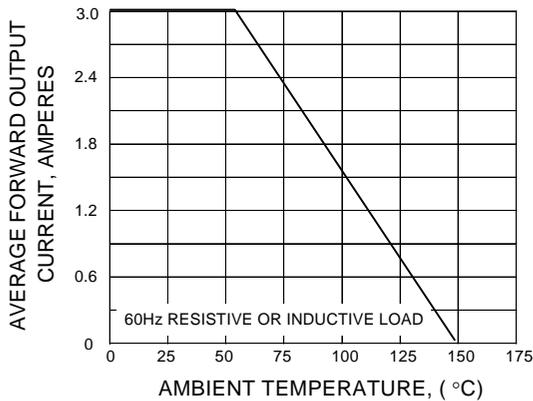
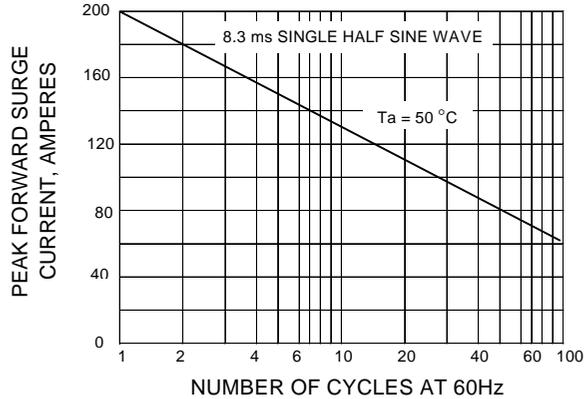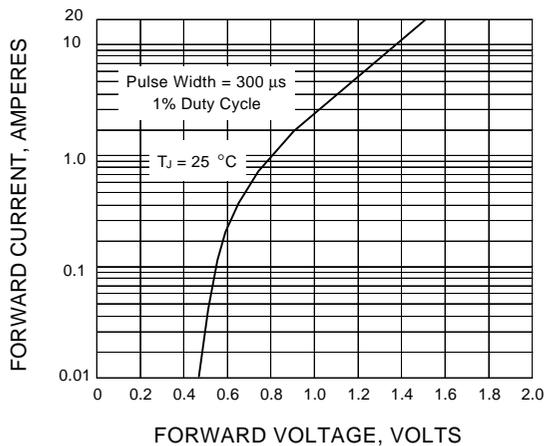### FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

FIG.4 - TYPICAL FORWARD CHARACTERISTICS

FIG.5 - TYPICAL REVERSE CHARACTERISTICS

www.sunmate.tw