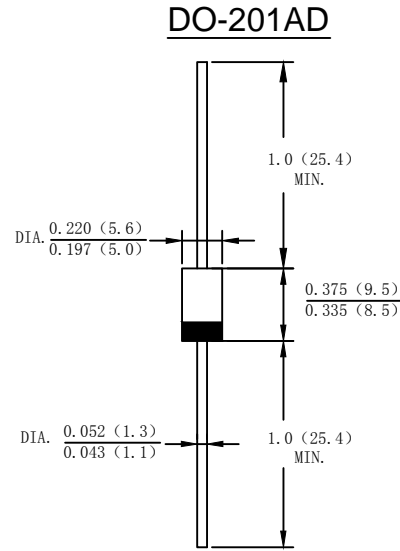


### Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Plastic material-UL flammability 94V-0

### Mechanical Data

- Case: Moulded plastic DO-201AD
- Terminals: Plated leads solderable per MIL-STD-202, Method 208 guaranteed
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Marking: Type Number
- Lead Free: For RoHS/Lead Free Version



### Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load

For capacitive load derate current by 20%

Type Number	SYMBOL	SF31	SF32	SF33	SF34	SF35	SF36	SF38	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	150	200	300	400	600	V
Maximum RMS Voltage	$V_{RMS}$	35	70	104	140	210	280	420	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	150	200	300	400	600	V
Maximum Average Forward Rectified Current. 375" (9.5mm) lead length @ $T_A=55^\circ C$	$I_o$	3.0							A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	125							A
Forward Voltage @ $I_F=3.0A$	$V_{FM}$	0.95			1.25		1.7		V
Peak Reverse Current @ $T_A=25^\circ C$	$I_R$	5.0							uA
At Rated DC Blocking Voltage @ $T_A=100^\circ C$		100							
Typical Junction Capacitance (Note 1)	$C_J$	70			45				pF
Typical Thermal Resistance Junction to Ambient (Note 2)	$R_{\theta JA}$	20							$^\circ C/W$
Maximum Reverse Recovery Time (Note 3)	$T_{rr}$	35							ns
Operating Temperature Range	$T_J$	-55 to +125							$^\circ C$
/Storage Temperature Range	$T_{STG}$	-55 to +150							$^\circ C$

Note: 1. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

2. Leads maintained at ambient temperature at a distance of 9.5mm from the case

3. Reverse Recovery Test Conditions:  $I_F=0.5A$ ,  $I_R=1A$ ,  $I_{rr}=0.25A$

FIG. 1 – FORWARD CURRENT DERATING CURVE

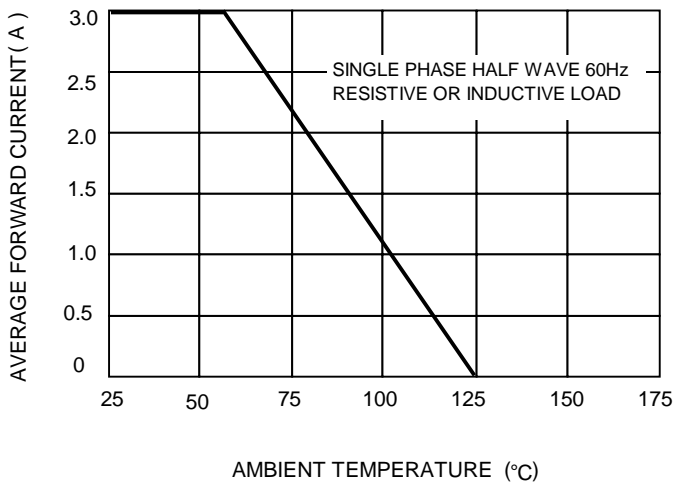


FIG.2-TYPICAL FORWARD CHARACTERISTICS

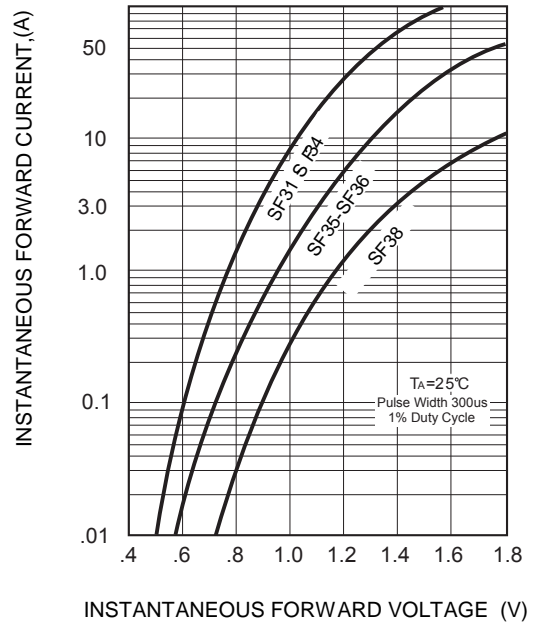


FIG. 3 – MAXIMUM NON-REPETITIVE SURGE CURRENT

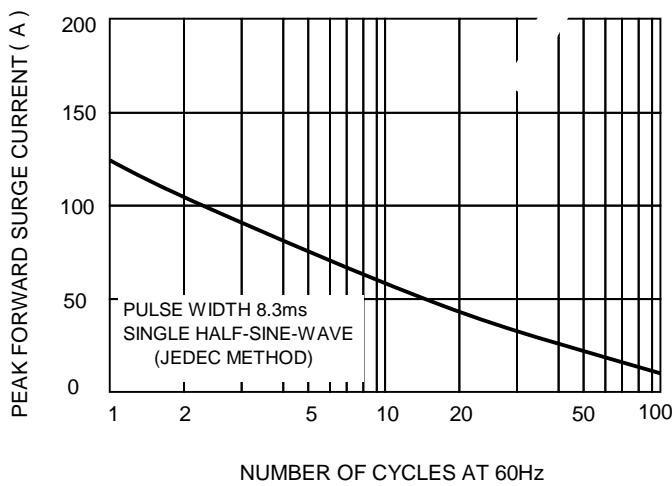


FIG.4 – TYPICAL JUNCTION CAPACITANCE

