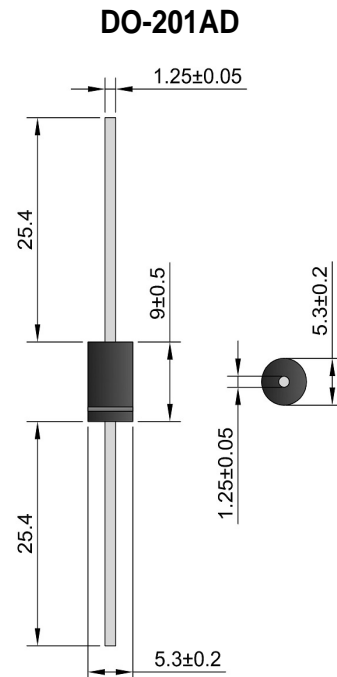


Features

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability

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
- **Lead Free: For RoHS / Lead Free Version**

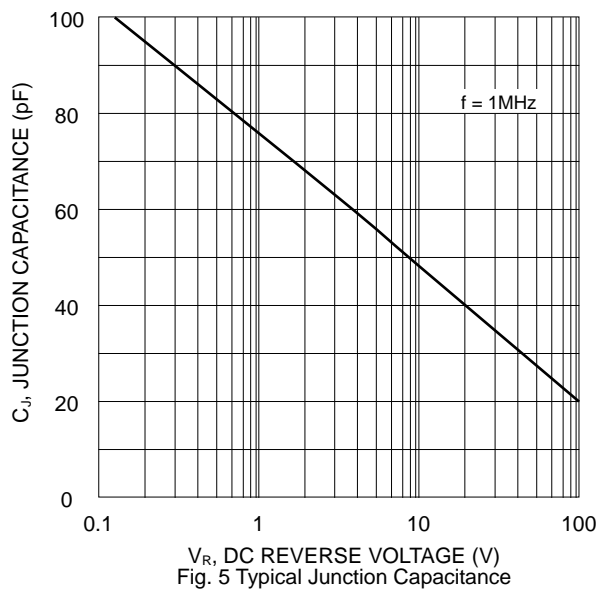
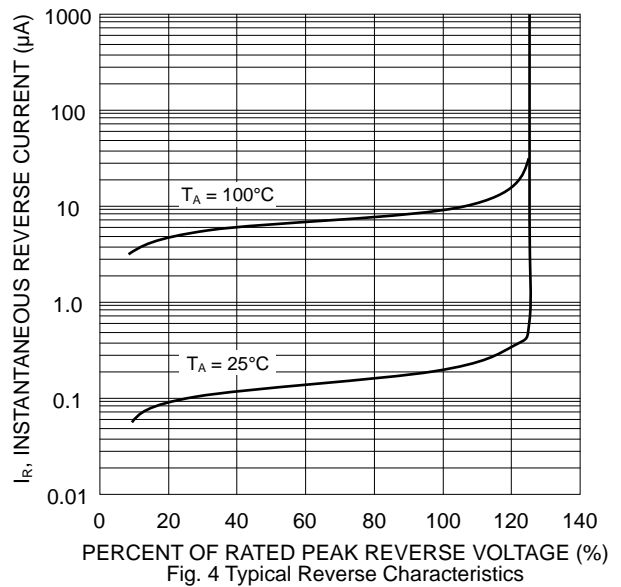
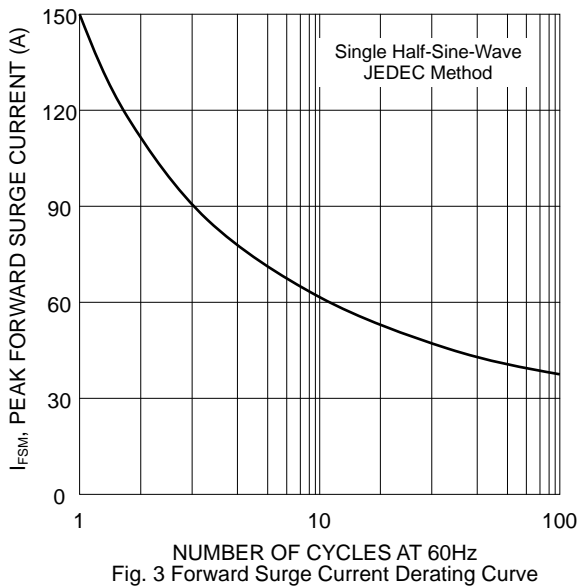
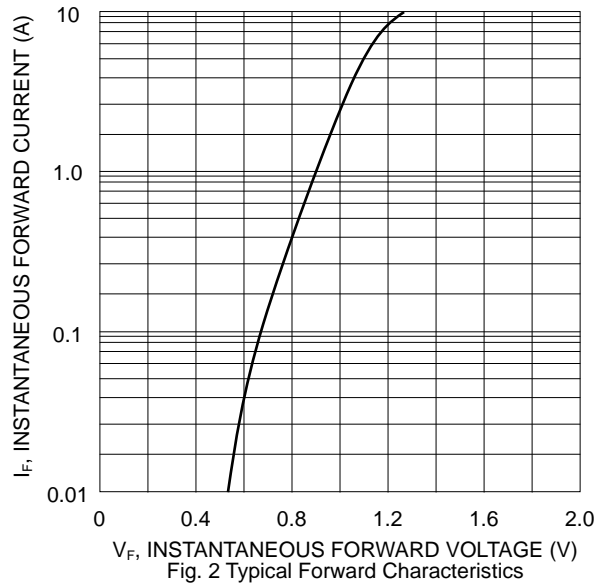
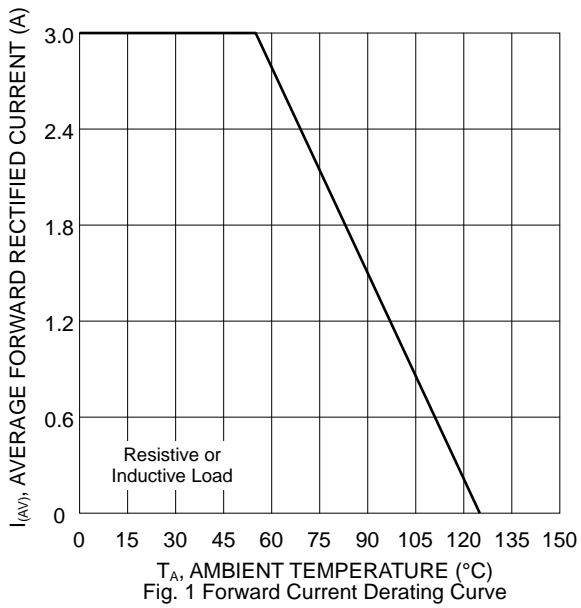


Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

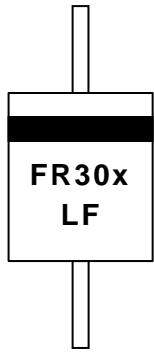
Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	FR301	FR302	FR303	FR304	FR305	FR306	FR307	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V_{RWM}								
DC Blocking Voltage	V_R								
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) @ $T_A = 55^\circ\text{C}$	I_O	3.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	150							A
Forward Voltage @ $I_F = 3.0\text{A}$	V_{FM}	1.2							V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$	I_{RM}	10 150							μA
Reverse Recovery Time (Note 2)	t_{rr}	150			250	500		nS	
Typical Junction Capacitance (Note 3)	C_J	60							pF
Typical Thermal Resistance Junction to Ambient (Note 1)	R_{JA}	22							$^\circ\text{C}/\text{W}$
Typical Thermal Resistance Junction to Lead (Note 1)	R_{JL}	8.0							
Operating Temperature Range	T_J	-65 to +125							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65 to +150							$^\circ\text{C}$

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case.
2. Measured with $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $I_{RR} = 0.25\text{A}$.
3. Measured at 1.0 MHz and Applied Reverse Voltage of 4.0V D.C.

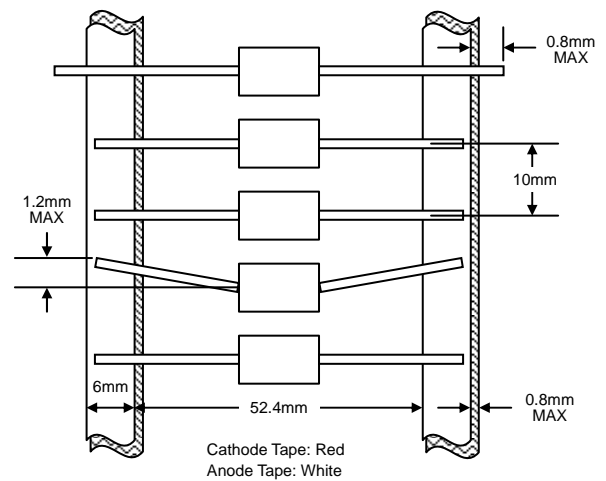


MARKING INFORMATION



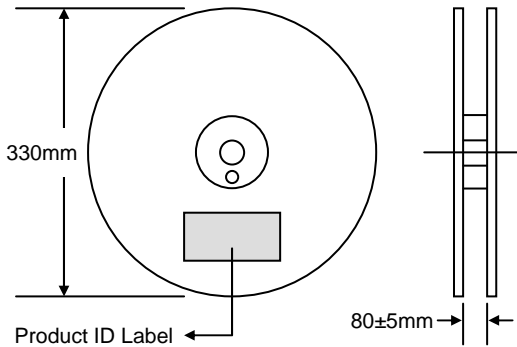
Cathode = Polarity Band
 FR30x = Device Number
 x = 1, 2, 3, 4, 5, 6 or 7

TAPING SPECIFICATIONS

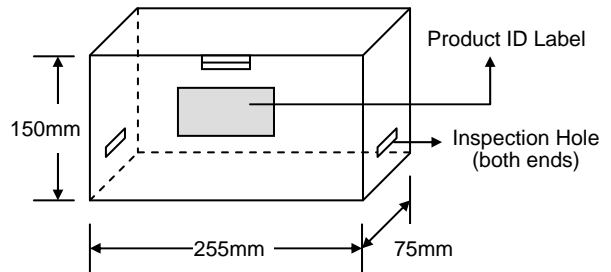


PACKAGING INFORMATION

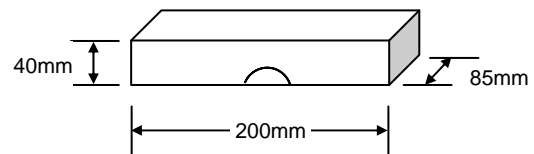
TAPE & REEL



TAPE & BOX



BULK



Packaging	Reel Diameter / Box Size (mm)	Quantity (PCS)	Carton Size (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
TAPE & REEL	330	1,200	370 x 370 x 420	6,000	10.0
TAPE & BOX	255 x 75 x 150	1,200	400 x 273 x 415	12,000	17.0
BULK	200 x 85 x 40	500	459 x 214 x 256	12,500	16.0