



■ Features

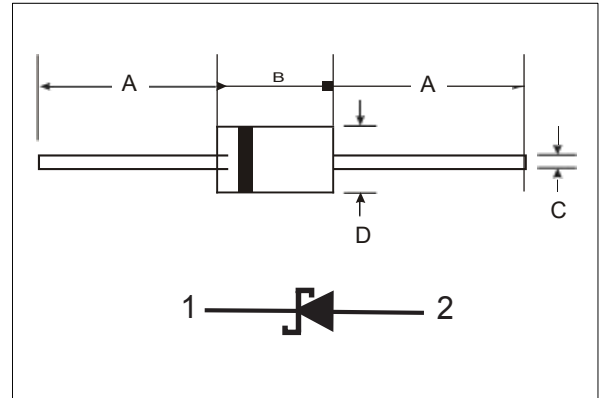
- Guard Ring Die Construction for Transient Protection
- High Current Capability
- Low Power Loss, High Efficiency
- High Surge Current Capability
- Comply with RoHS standard

■ Applications

- Low Voltage, High Frequency Inverters
- Free Wheeling, and Polarity Protection Applications

■ Mechanical Data

- package:DO-201AD/DO-27
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Mounting Position : Any



DO-201AD/DO-27		
Dim	Min	Max
A	24.00	—
B	7.20	9.50
C	1.15	1.25
D	5.00	5.60
All Dimensions in mm		

■ Maximum Ratings And Electrical Characteristics($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Characteristic	Symbol	1N5823	1N5824	1N5825	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	VRRM VRWM VR	20	30	40	V
RMS Reverse Voltage	VR(RMS)	14	21	28	V
Average Rectified Output Current (Note 1) @ $T_L = 100^{\circ}\text{C}$	IO	5.0			A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	150			A
Forward Voltage @ $I_F = 5.0\text{A}$	VFM	0.55			V
Peak Reverse Current @ $T_A = 25^{\circ}\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^{\circ}\text{C}$	IRM	0.5 50			mA
Typical Junction Capacitance (Note 2)	Cj	500			pF
Typical Thermal Resistance (Note 1)	R θ JA	10			$^{\circ}\text{C}/\text{W}$
Operating and Storage Temperature Range	Tj, TSTG	-65 to +150			$^{\circ}\text{C}$

Note: 1. Valid provided that leads are kept at ambient temperature at a distance of 9.5mm from the case.

2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.



■ Characteristics Curves($T_A=25^\circ\text{C}$ unless otherwise noted)

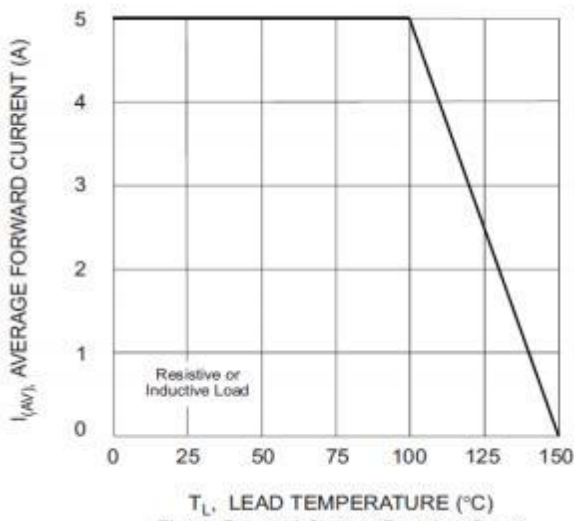


Fig. 1 Forward Current Derating Curve

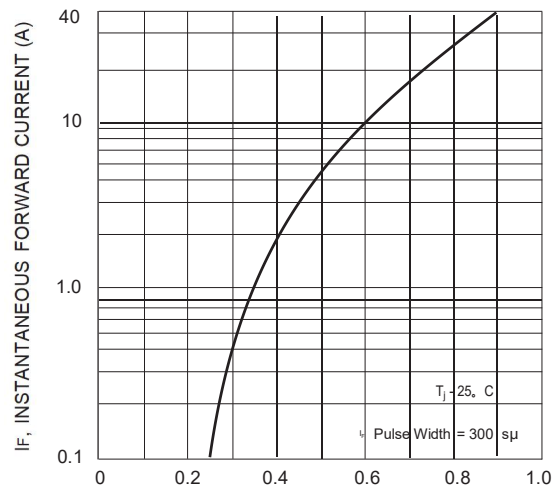


Fig. 2 Typical Forward Characteristics

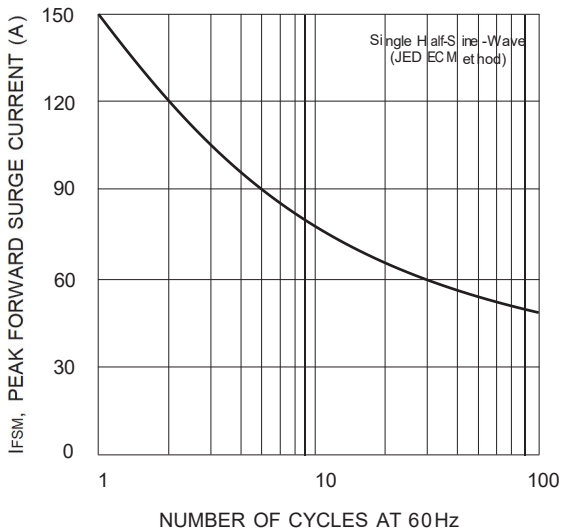


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

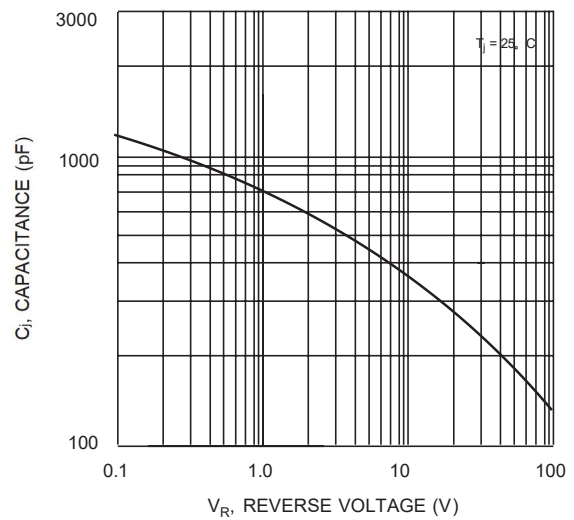


Fig. 4 Typical Junction Capacitance

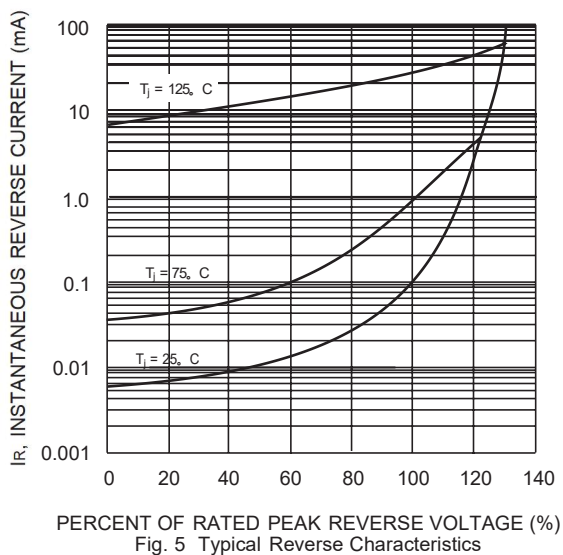


Fig. 5 Typical Reverse Characteristics