



昌福半导体

CHANG FU SEMICONDUCTOR

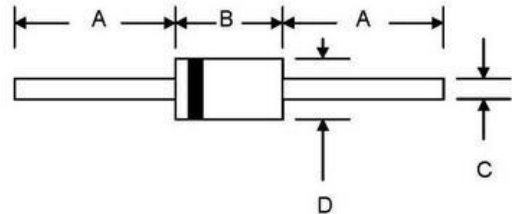
ER501G-508G

Features

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

Mechanical Data

- Case: 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



DO-201AD		
Dim	Min	Max
A	25.4	—
B	8.50	9.50
C	1.20	1.30
D	5.0	5.60
All Dimensions in mm		

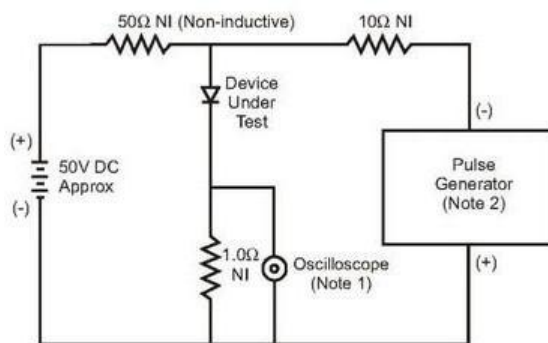
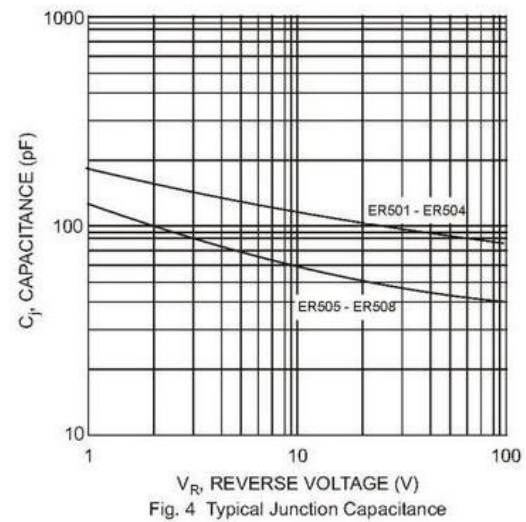
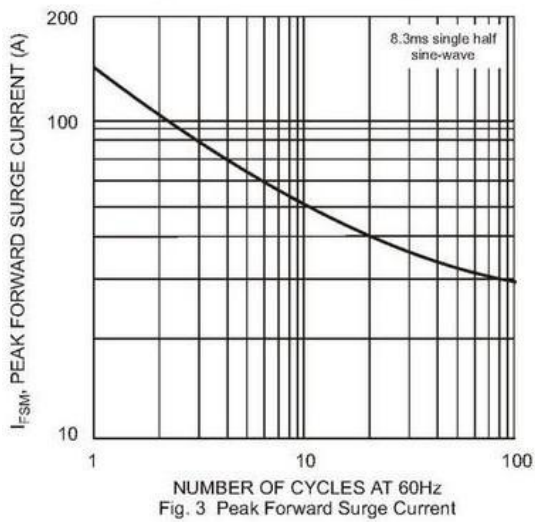
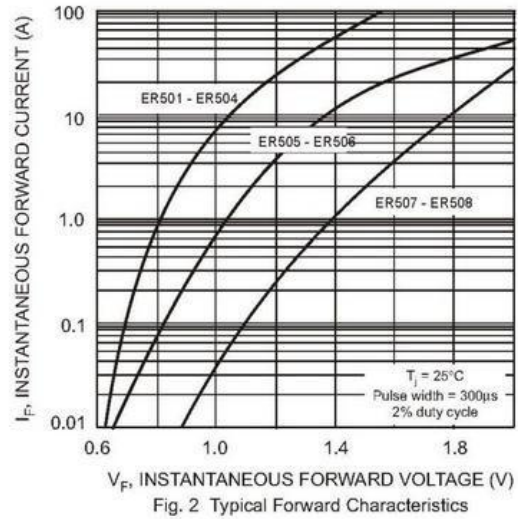
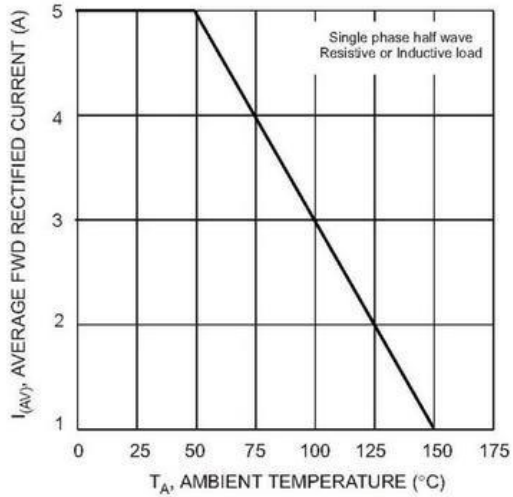
Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

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

Characteristic	Symbol	ER501	ER502	ER503	ER504	ER505	ER506	ER507	ER508	Unit	
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{VRWM} V _R	50	100	150	200	300	400	500	600	V	
RMS Reverse Voltage	V _{R(RMS)}	35	70	105	140	210	280	350	420	V	
Average Rectified Output Current (Note 1) @T _A = 55°C	I _O	5.0								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 = 5.0A	V _{FM}	0.975				1.30		1.70		V	
Peak Reverse Current @T _A = 25°C At Rated DC Blocking Voltage @T _A = 100°C	I _{RM}	5.0 100				μA					
Reverse Recovery Time (Note 2)	t _{rr}	35								nS	
Typical Junction Capacitance (Note 3)	C _j	100				60					pF
Operating Temperature Range	T _J	-65 to +150								°C	
Storage Temperature Range	T _{STG}	-65 to +150								°C	

*Glass passivated forms are available upon request

- Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case
2. Measured with I_F = 0.5A, I_R = 1.0A, I_{RR} = 0.25A. See figure 5.
3. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.



- Notes:
1. Rise Time = 7.0ns max. Input Impedance = 1.0MΩ, 22pF.
 2. Rise Time = 10ns max. Input Impedance = 50Ω.

