



### 3.0A Glass Passivated Leaded Fast Efficient Rectifiers - 50V- 600V

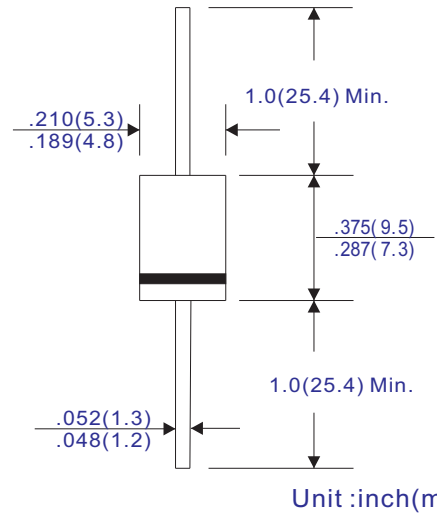
#### FEATURES

- Low reverse leakage current
- Low forward drop down voltage
- High surge current capability
- High current capability
- Fast switching speed for high efficiency
- Glass passivated chip junction
- High Reliability
- Lead -free parts for green partner

#### MECHANICAL DATA

- Case: JEDEC DO-201AD molded plastic
- Epoxy: UL94-V0 rated flame retardant
- Terminals: Solderable per MIL-STD-750 Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.04 ounces, 1.1 grams

#### DO-201AD



#### MAXIMUM RATING AND ELECTRICAL CHARACTERISTICS

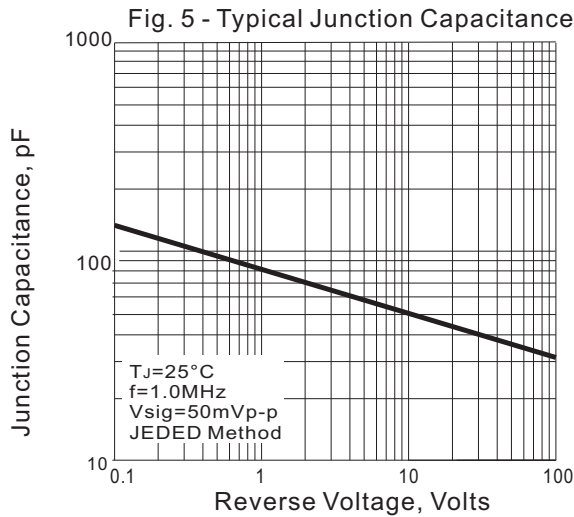
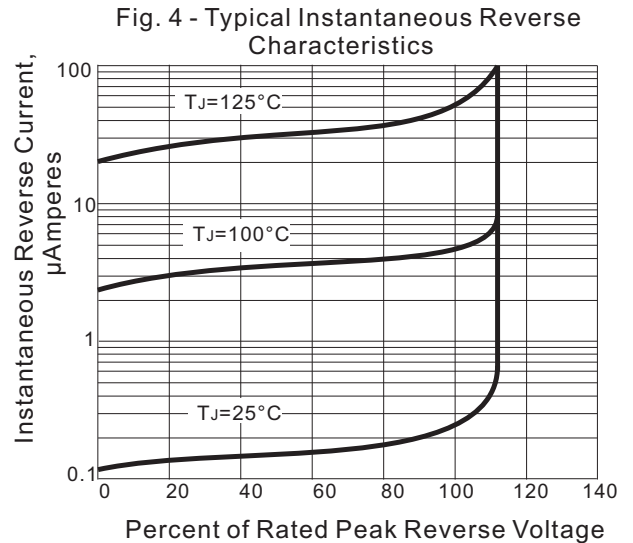
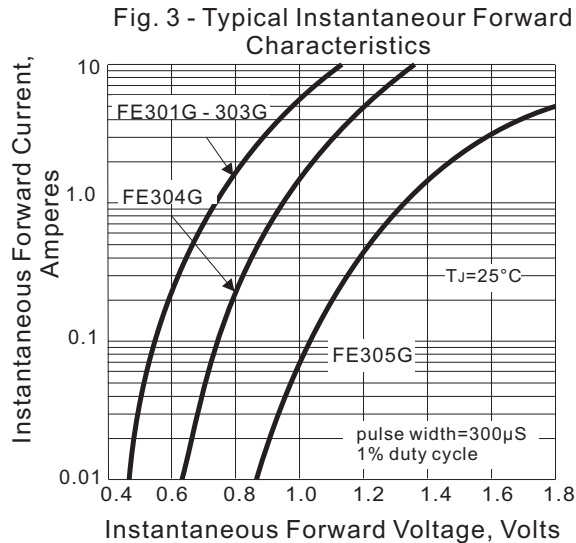
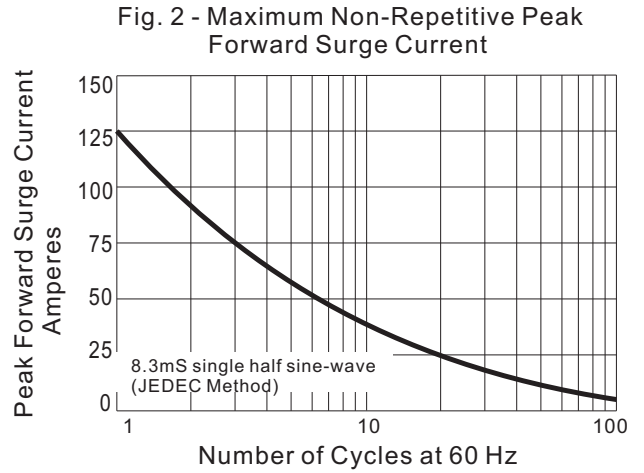
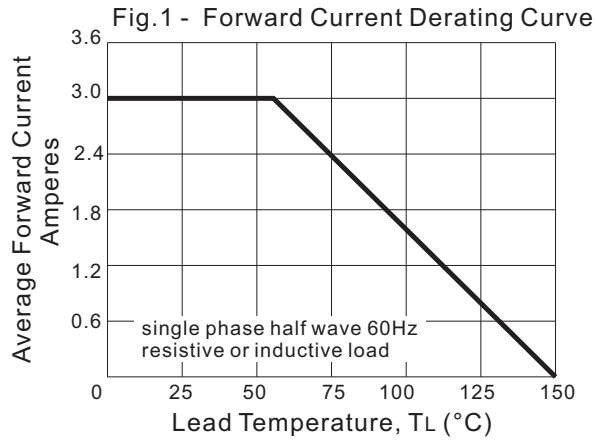
Ratings at 25°C ambient temperature unless otherwise specified

	Symbols	FE301G	FE302G	FE303G	FE304G	FE305G	Units
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	Volts
Maximum RMS Voltage	VRMS	35	70	140	280	420	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	Volts
Maximum Average Forward Rectified Current @TL=55°C, See Figure 1	I(AV)	3.0					Amps
Peak Forward Surge Current 8.3mS single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	125					Amps
Maximum Instantaneous Forward Voltage at 3.0A	VF	0.92		1.25	1.7	Volts	
Maximum DC Reverse Current at Rated DC Blocking Voltage	IR	5.0 150.0					µA
Maximum Reverse Recovery Time (Note 1)	Trr	15		25	35	nS	
Typical Junction Capacitance (Note 2)	CJ	60					pF
Typical Thermal Resistance (Note 3)	RθJA	50					°C/W
Operating Junction Temperature Range	TJ	-55 ~ +150					°C
Storage Temperature Range	TSTG	-55 ~ +150					°C

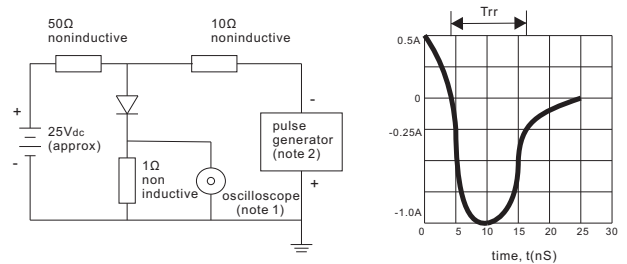
Note 1. Reverse recovery test condition: IF=0.5A, IR=1.0A, Irr=0.25A

2. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts

3. Thermal resistance from junction to ambient, both leads are attached to heatsink 20x20x1t(mm) copper plate at lead length 5mm



**Fig. 6 - Test Circuit Diagram and Reverse Recovery Time Characteristic**



Note: 1. rise time=7nS Max. input impedance=1MΩ, 22pF  
 2. rise time=10nS Max. source impedance=80Ω