

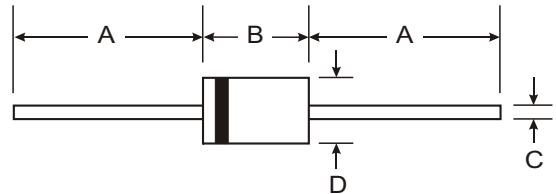
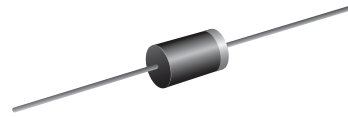
**VOLTAGE RANGE: 50 - 1000V**  
**CURRENT: 5.0 A**

### 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



DO-201AD		
Dim	Min	Max
A	25.40	—
B	8.50	9.53
C	0.96	1.06
D	4.80	5.21
All Dimensions in mm		

### Maximum Ratings and Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise specified

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

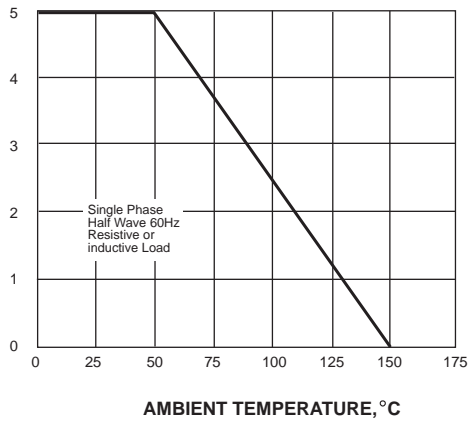
Characteristic	Symbol	EGP 50A	EGP 50B	EGP 50D	EGP 50F	EGP 50G	EGP 50J	EGP 50K	EGP 50M	Unit	
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	50	100	200	300	400	600	800	1000	V	
Working Peak Reverse Voltage	V <sub>RWM</sub>										
DC Blocking Voltage	V <sub>R</sub>										
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	70	140	210	280	420	560	700	V	
Average Rectified Output Current (Note 1) @T <sub>A</sub> = 55°C	I <sub>O</sub>	5.0								A	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	150								A	
Forward Voltage @I <sub>F</sub> = 5.0A	V <sub>FM</sub>	1.0			1.3		1.7			V	
Peak Reverse Current @T <sub>A</sub> = 25°C	I <sub>RM</sub>	10								μA	
At Rated DC Blocking Voltage @T <sub>A</sub> = 100°C		100									
Reverse Recovery Time (Note 2)	t <sub>rr</sub>	50					75				nS
Typical Junction Capacitance (Note 3)	C <sub>j</sub>	75					50				pF
Operating Temperature Range	T <sub>j</sub>	-65 to +125								°C	
Storage Temperature Range	T <sub>STG</sub>	-65 to +150								°C	

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case  
 2. Measured with I<sub>F</sub> = 0.5A, I<sub>R</sub> = 1.0A, I<sub>RR</sub> = 0.25A. See figure 5.  
 3. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

## RATINGS AND CHARACTERISTIC CURVES EGP50A THRU EGP50M

AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



PEAK FORWARD SURGE CURRENT, AMPERES

FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

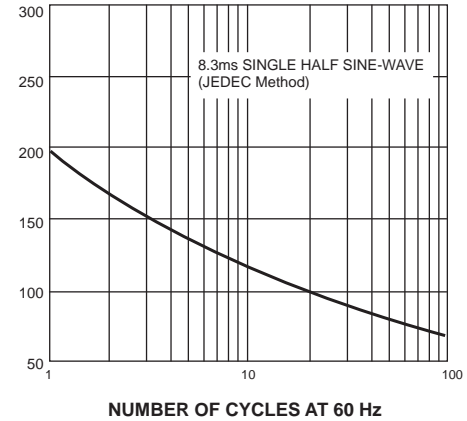
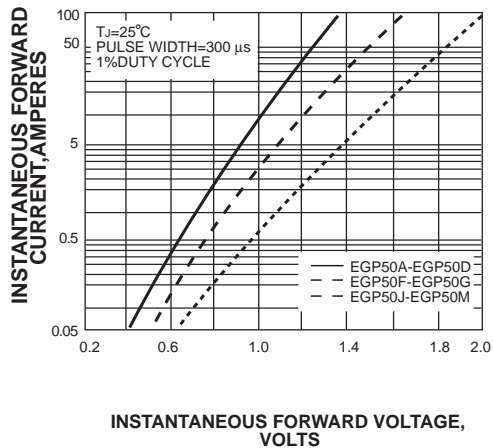


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



INSTANTANEOUS REVERSE CURRENT, MICROAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS

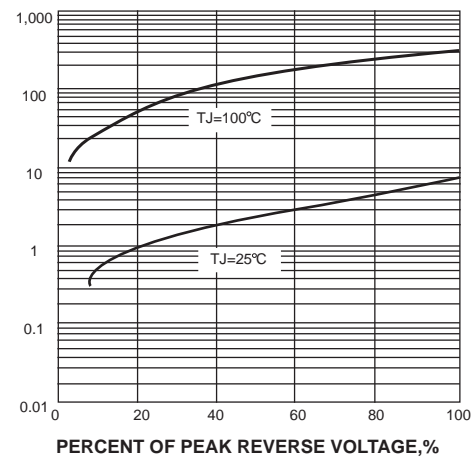
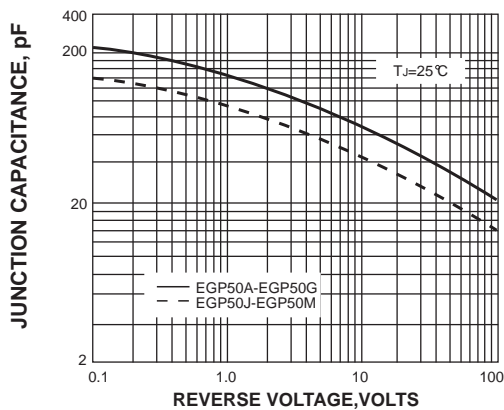


FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE, °C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

