



Micro Commercial Components  
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# EGP10A THRU EGP10K

## Features

- Superfast recovery time for high efficiency
- Glass passivated cavity-free junction, Plastic Case
- Low forward voltage, high current capability
- Low leakage current

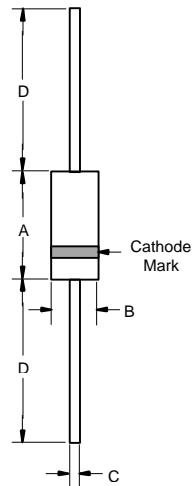
**1.0 Amp Glass  
 Passivated High  
 Efficient Rectifiers  
 50 to 800 Volts**

## Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Typical Thermal Resistance: 50°C/W Junction to Ambient

MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
EGP10A	50V	35V	50V
EGP10B	100V	70V	100V
EGP10D	200V	140V	200V
EGP10F	300V	210V	300V
EGP10G	400V	280V	400V
EGP10J	600V	420V	600V
EGP10K	800V	560V	800V

## DO-41



## Electrical Characteristics @ 25°C Unless Otherwise Specified

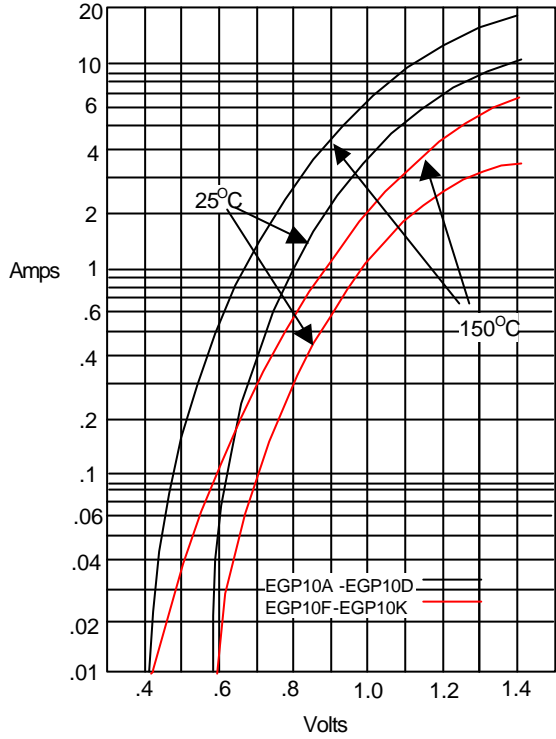
Average Forward Current	$I_{F(AV)}$	1.0 A	$T_A = 55^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	EGP10A-10D: 0.95V EGP10F-10G: 1.25V EGP10J-10K: 1.70V	$I_F = 1.0\text{A}$ $T_A = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5.0uA 100uA	$T_A = 25^\circ\text{C}$ $T_A = 125^\circ\text{C}$
Maximum Reverse Recovery Time	$t_{rr}$	EGP10A-10G: 50nS EGP10J-10K: 75nS	$I_F = 0.5\text{A}$ , $I_R = 1.0\text{A}$ , $I_{RR} = 0.25\text{A}$ $T_J = 25^\circ\text{C}$
Typical Junction Capacitance	$C_J$	EGP10A-10D: 22pF EGP10F-10K: 15pF	Measured at 1.0MHz, $V_R = 4.0\text{V}$

DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.166	.205	4.10	5.20	
B	.080	.107	2.00	2.70	
C	.028	.034	.70	.90	
D	1.000	---	25.40	---	

# EGP10A thru EGP10K

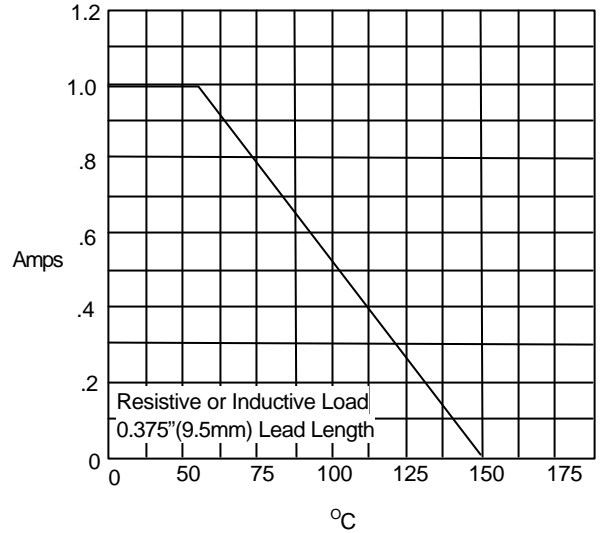


Figure 1  
Typical Forward Characteristics



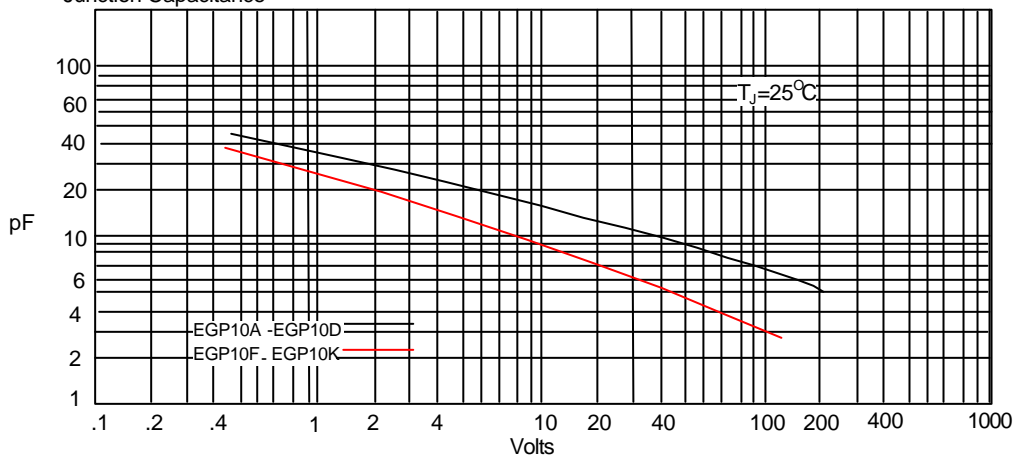
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



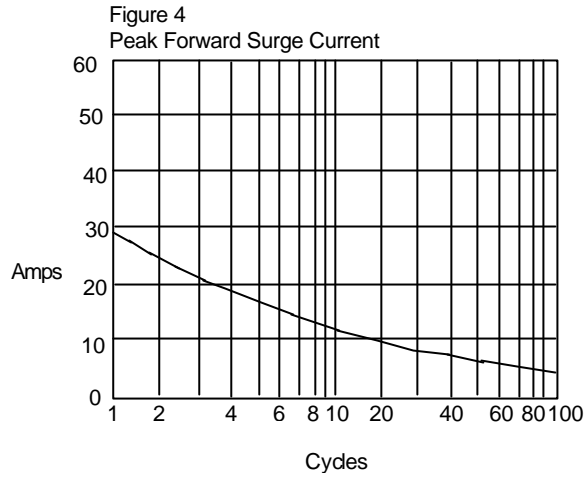
Average Forward Rectified Current - Amperes versus  
Ambient Temperature - °C

Figure 3  
Junction Capacitance



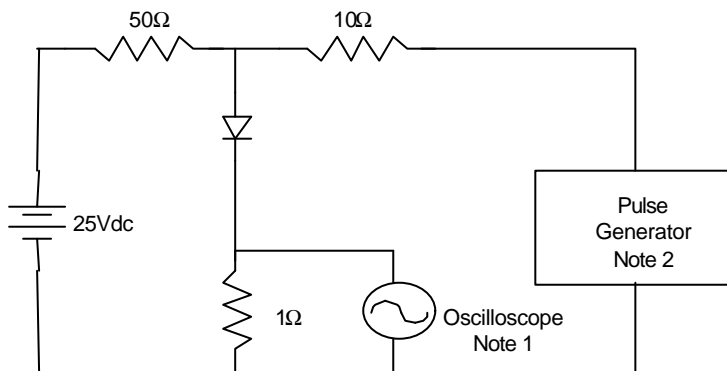
Junction Capacitance - pF versus  
Reverse Voltage - Volts

# EGP10A thru EGP10K



Peak Forward Surge Current - Amperes *versus* Number Of Cycles At 60Hz - Cycles

Figure 5  
Reverse Recovery Time Characteristic And Test Circuit Diagram



- Notes:
1. Rise Time = 7ns max.  
Input impedance = 1 megohm, 22pF
  2. Rise Time = 10ns max.  
Source impedance = 50 ohms
  3. Resistors are non-inductive

