



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

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

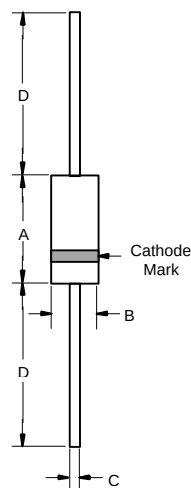
MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
EGP10A	50V	35V	50V
EGP10B	100V	70V	100V
EGP10D	200V	140V	200V
EGP10F	300V	210V	300V
EGP10G	400V	280V	400V
EGP10J	600V	420V	600V
EGP10K	800V	560V	800V

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 EGP10A-10D EGP10F-10G EGP10J-10K	V_F	0.95V 1.25V 1.70V	$I_F=1.0A$ $T_A=25^\circ\text{C}$
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 EGP10A-10G EGP10J-10K	t_{rr}	50nS 75nS	$I_F=0.5A$, $I_R=1.0A$, $I_{RR}=0.25A$ $T_J=25^\circ\text{C}$
Typical Junction Capacitance EGP10A-10D EGP10F-10K	C_J	22pF 15pF	Measured at 1.0MHz, $V_R=4.0V$

1.0 Amp Glass Passivated High Efficient Rectifiers 50 to 800 Volts

DO-41

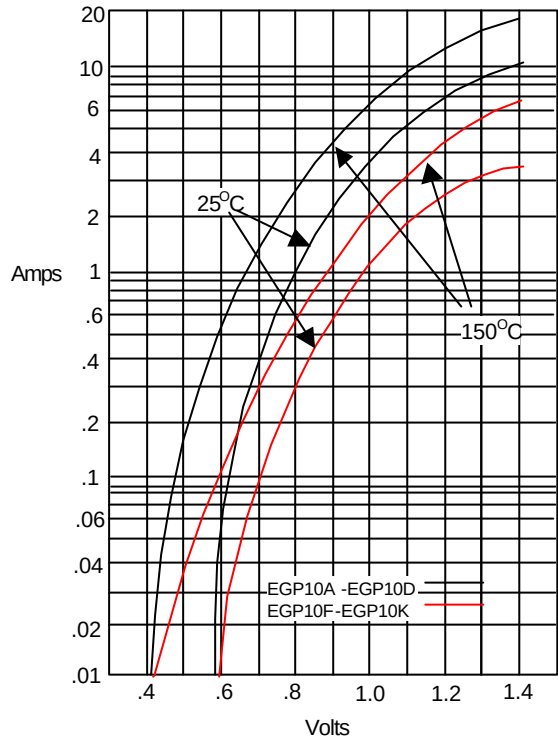


DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.166	.205	4.10	5.20	
B	.080	.107	2.00	2.70	
C	.028	.034	.70	.90	
D	1.000	---	25.40	---	

EGP10A thru EGP10K

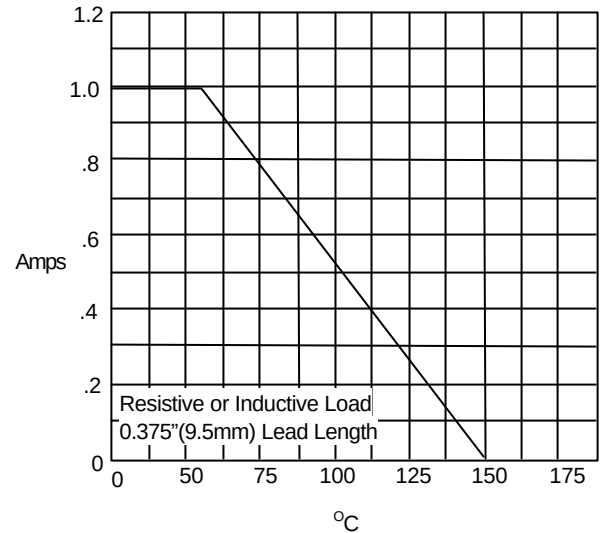


Figure 1
Typical Forward Characteristics



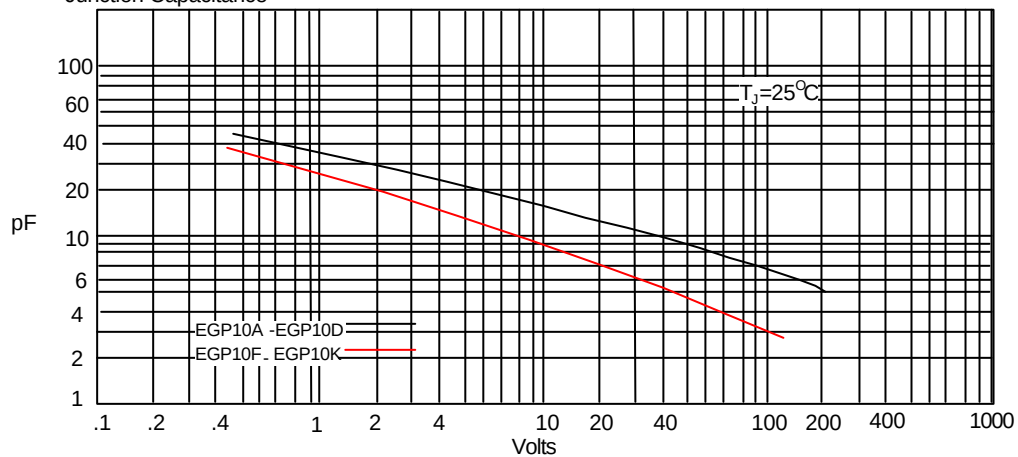
Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



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

Figure 3
Junction Capacitance

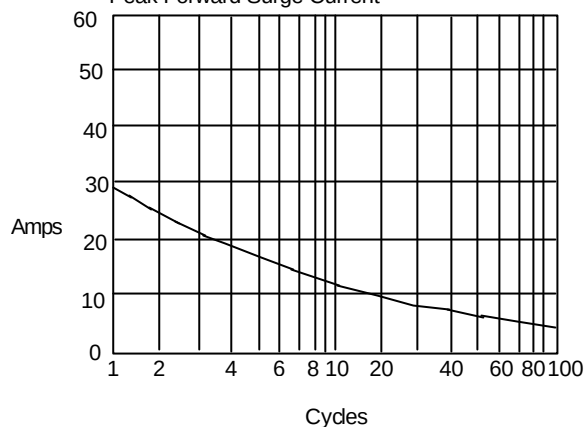


Junction Capacitance - pF versus
Reverse Voltage - Volts

EGP10A thru EGP10K

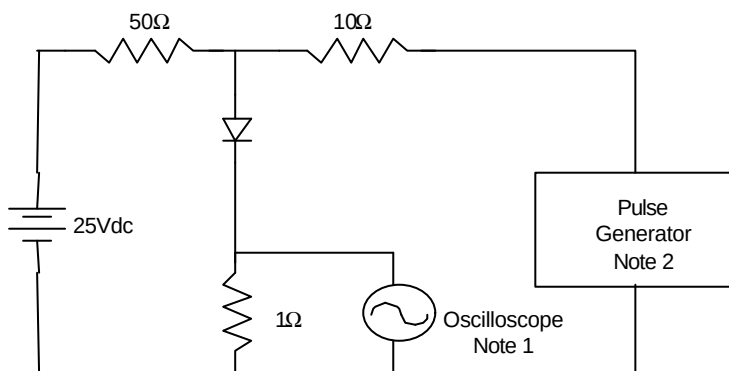


Figure 4
Peak Forward Surge Current



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

