



Micro Commercial Components



Micro Commercial Components  
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# ER1QG

## 1 Amp Super Fast Recovery Silicon Rectifier 1200 Volts

### Features

- Epoxy meets UL 94 V-0 flammability rating
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- For surface mount applications
- Extremely low thermal resistance
- High temp soldering: 260°C for 10 seconds at terminals
- Super fast recovery time for high efficiency
- Moisture sensitivity level 1
- Perfect for Ballast, television and monitor applications

### Maximum Ratings

- Operating Temperature: -50°C to +150°C
- Storage Temperature: -50°C to +150°C
- Maximum Thermal Resistance; 15°C/W Junction To Lead

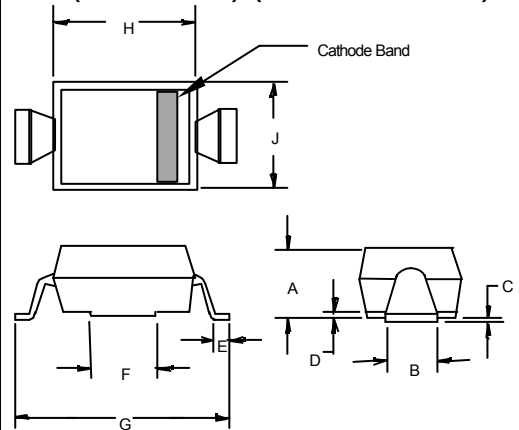
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
ER1QG	ER1Q	1200V	840V	1200V

### Electrical Characteristics @25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.0A	$T_a = 55^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	1.85V	$I_{FM} = 1.0A$ ; $T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5 $\mu\text{A}$ 30 $\mu\text{A}$	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Maximum Reverse Recovery Time	$T_{rr}$	150ns	$I_F=0.5A, I_R=1.0A,$ $I_{rr}=0.25A$
Typical Junction Capacitance	$C_J$	45pF	Measured at 1.0MHz, $V_R=4.0V$

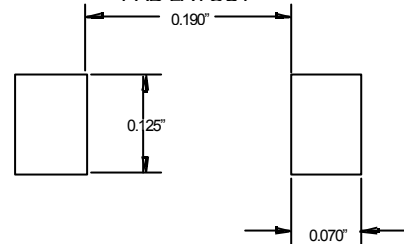
\*Pulse test: Pulse width 200  $\mu\text{sec}$ , Duty cycle 2%

### DO-215AA (HSMBG) (Round Lead)

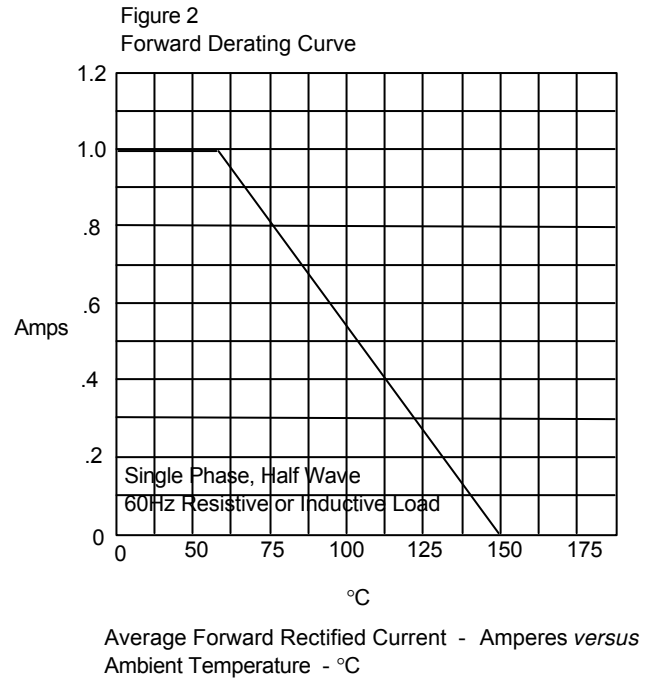
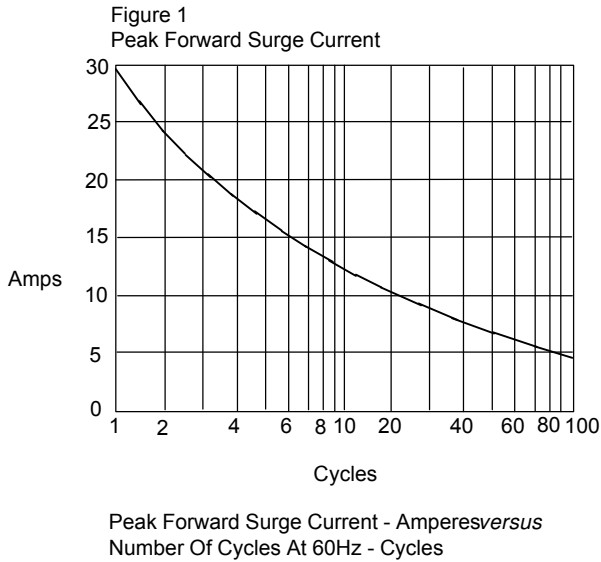


DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.075	.116	1.90	2.95	
B	.078	.087	1.98	2.21	
C	.002	.008	.05	.20	
D		.02		.51	
E	.015	.03	.38	.76	
F	.065	.084	1.65	2.13	
G	.245	.276	6.22	7.00	
H	.160	.180	4.06	4.57	
J	.130	.151	3.30	3.83	

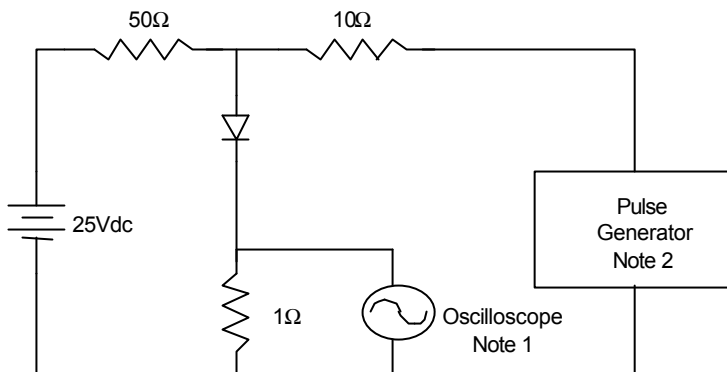
### SUGGESTED SOLDER PAD LAYOUT



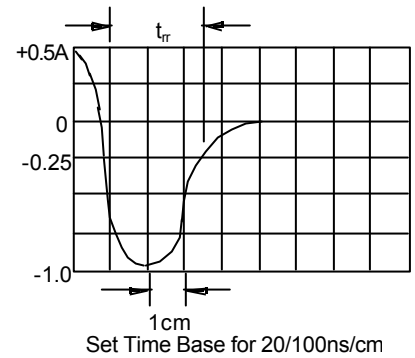
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**Figure 3**  
Reverse Recovery Time Characteristic And Test Circuit Diagram



- 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





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Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

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