# NOT RECOMMENDED FOR NEW DESIGNS USE ER1Q-LTP





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## ER1QG

### **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

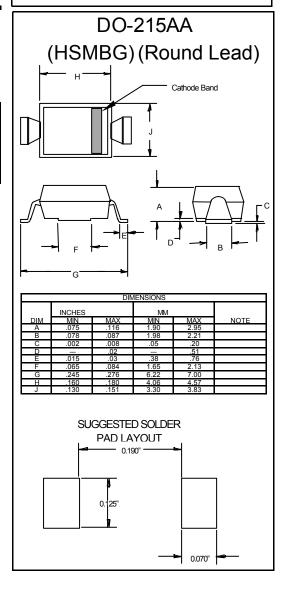
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
ER1QG	ER1Q	1200V	840V	1200V

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

Average Forward Current	I <sub>F(AV)</sub>	1.0A	T <sub>a</sub> = 55°C
Peak Forward Surge Current	I <sub>FSM</sub>	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage			
	$V_{F}$	1.85V	I <sub>FM</sub> = 1.0A; T <sub>J</sub> = 25°C*
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	5μΑ 30μΑ	T <sub>J</sub> = 25°C T <sub>J</sub> = 125°C
Maximum Reverse Recovery Time			
	T <sub>rr</sub>	150ns	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, I <sub>rr</sub> =0.25A
Typical Junction Capacitance	С	45pF	Measured at 1.0MHz, V <sub>R</sub> =4.0V

<sup>\*</sup>Pulse test: Pulse width 200  $\mu sec$ , Duty cycle 2%

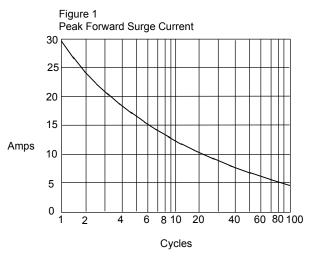
# 1 Amp Super Fast Recovery Silicon Rectifier 1200 Volts



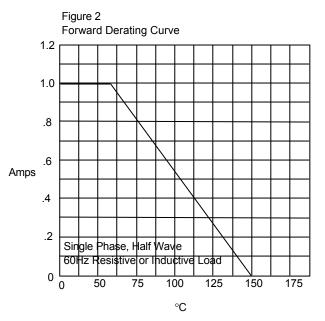


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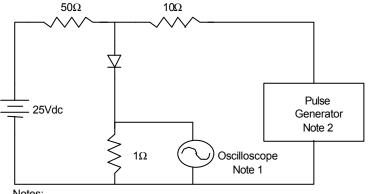


Peak Forward Surge Current - Amperesversus Number Of Cycles At 60Hz - Cycles



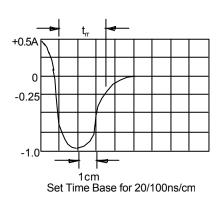
Average Forward Rectified Current - Amperes versus Ambient Temperature - °C

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





#### **Micro Commercial Components**

### **Ordering Information:**

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

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