

# EU1DG

## ULTRAFAST EFFICIENT PLASTIC SILICON RECTIFIER

VOLTAGE: 200V

CURRENT: 1.0A



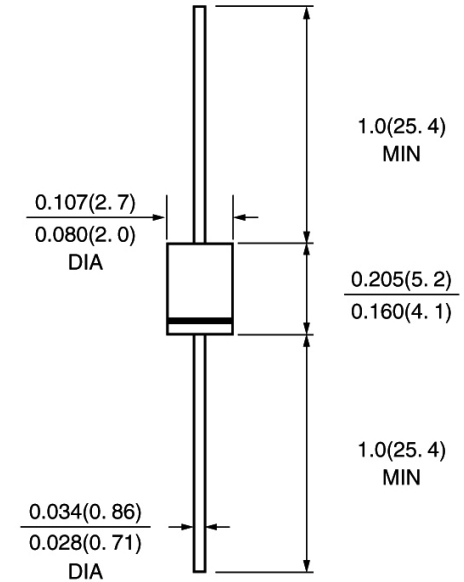
### FEATURE

Low power loss  
High surge capability  
Glass passivated chip junction  
Ultra-fast recovery time for high efficiency  
High temperature soldering guaranteed  
250°C/10sec/0.375" lead length at 5 lbs tension

### MECHANICAL DATA

Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C  
Case: Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy  
Polarity: color band denotes cathode  
Mounting position: any

### DO-41\DO-204AL



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	SYMBOL	EU1DG	units
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	200	V
Maximum RMS Voltage	V <sub>rms</sub>	140	V
Maximum DC blocking Voltage	V <sub>dc</sub>	200	V
Maximum Average Forward Rectified Current 3/8"lead length at Ta =55°C	I <sub>f(av)</sub>	1.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>fsm</sub>	30	A
Maximum Forward Voltage at rated Forward Current and 25°C	V <sub>f</sub>	1.1	V
Maximum full load reverse current full cycle average at 55°C Ambient	I <sub>r(av)</sub>	50	μA
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	I <sub>r</sub>	10.0 100.0	μA μA
Maximum Reverse Recovery Time (Note 1)	T <sub>rr</sub>	50	nS
Typical Junction Capacitance (Note 2)	C <sub>j</sub>	17	pF
Typical Thermal Resistance (Note 3)	R <sub>th(ja)</sub>	50	°C /W
Storage and Operating Temperature Range	T <sub>stg</sub> , T <sub>j</sub>	-55 to +150	°C

#### Note:

1. Reverse Recovery Condition I<sub>f</sub> =0.5A, I<sub>r</sub> =1.0A, I<sub>rr</sub> =0.25A
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. Thermal Resistance from Junction to Ambient at 3/8"lead length, P.C. Board Mounted

RATINGS AND CHARACTERISTIC CURVES EU1DG

FIG. 1 - MAXIMUM FORWARD CURRENT DERATING CURVE

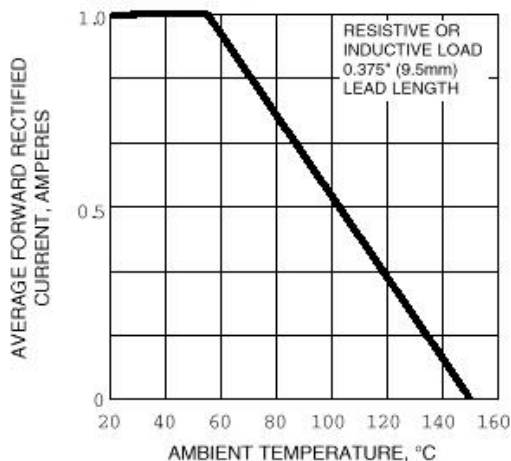


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

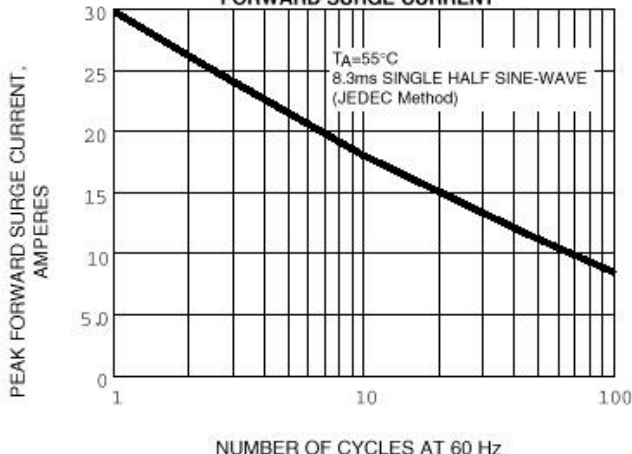


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

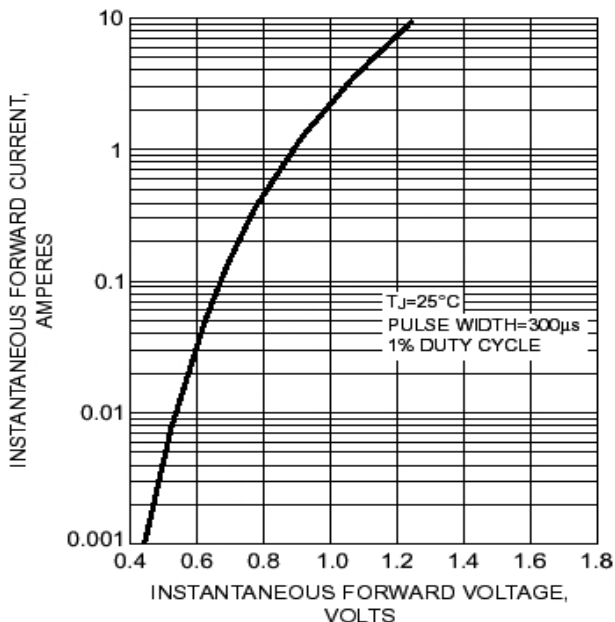


FIG. 4 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS

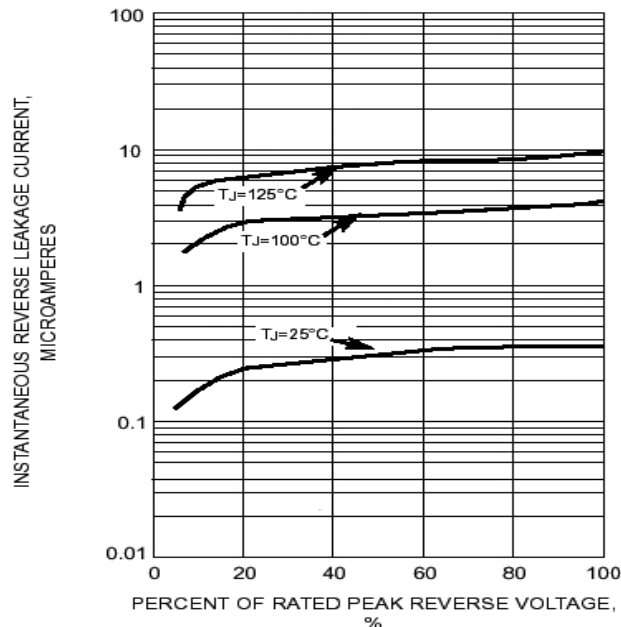


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

