

## **FEATURES**

The plastic package carries Underwriters Laboratory

Flammability Classification 94V-0

High speed switching for high efficiency

Low reverse leakage

High forward surge current capability

High temperature soldering guaranteed:

260°C/10 seconds,0.375"(9.5mm) lead length,

5 lbs. (2.3kg) tension

## **MECHANICAL DATA**

Case: JEDEC DO-15 molded plastic body

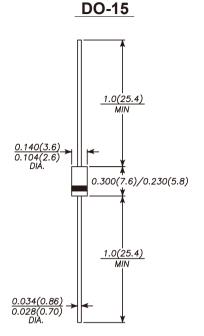
Terminals: Plated axial leads, solderable per MIL-STD-750,

Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.014 ounce, 0.40 grams



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Type Number	Symbol	ER208	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	800	V
Maximum RMS Voltage	$V_{RMS}$	560	V
Maximum DC Blocking Voltage	$V_{DC}$	800	V
Maximum Average Forward Rectified Current .375 (9.5mm) Lead Length @T <sub>A</sub> = 55 °C	I <sub>(AV)</sub>	2.0	Α
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)		50	Α
Maximum Instantaneous Forward Voltage  @ 6.0A	V <sub>F</sub>	2.2	V
Maximum DC Reverse Current @ $T_A$ =25 °C at Rated DC Blocking Voltage @ $T_A$ =125 °C	I <sub>R</sub>	5.0 100	uA uA
Maximum Reverse Recovery Time	Trr	35	nS
Typical Junction Capacitance	Cj	35	pF
Typical Thermal Resistance	R <sub>θJA</sub> R <sub>θJL</sub>	25 5.0	°C/W
Operating Temperature Range	TJ	-65 to +150	°C
Storage Temperature Range	$T_{STG}$	-65 to +150	°C

Notes: 1. Reverse Recovery Test Conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, I<sub>RR</sub>=0.25A

2. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.





FIG. 1 - FORWARD CURRENT DERATING CURVE

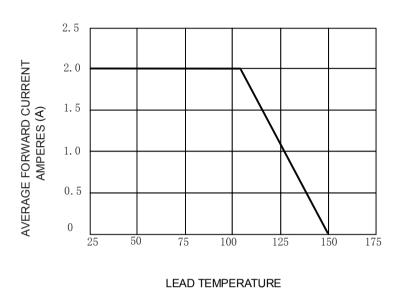
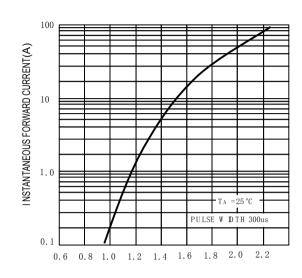


FIG.2-TYPICAL FORWARD CHARACTERISTICS



INSTANTANEOUS FORWARD VOLTAGE ( V )

FIG. 3 - MAXIMUM NON-REPETITIVE SURGE CURRENT

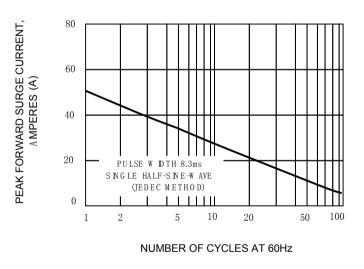


FIG.4 - TYPICAL JUNCTION CAPACITANCE

