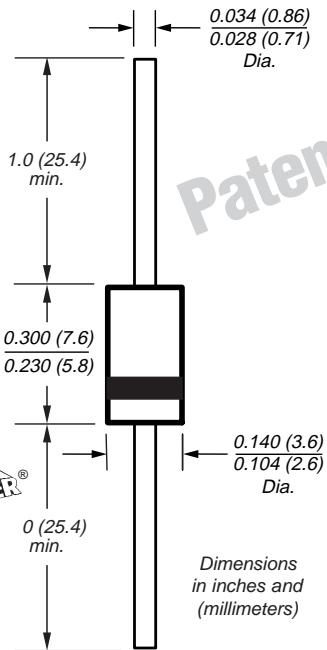



**DO-204AC (DO-15)**

**SUPERRECTIFIER®**

\* Glass-plastic encapsulation technique is covered by Patent No. 3,996,602 and brazed-lead assembly by Patent No. 3,930,306.

## Miniature Clamper/Damper Glass Passivated Rectifier

 Reverse Voltage 1650V  
 Forward Current 1.5A

### Features

- Specially designed for clamping circuits, horizontal deflection systems and damper applications
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0.
- High temperature metallurgically bonded construction
- Cavity-free glass passivated junction
- 1.5 Ampere operation at TA=50°C with no thermal runaway
- Typical IR less than 0.1µA
- Capable of meeting environmental standards of MIL-S-19500
- High temperature soldering guaranteed: 350°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

### Mechanical Data

**Case:** JEDEC DO-204AC, molded plastic over glass body

**Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026

**Polarity:** Color band denotes cathode end

**Mounting Position:** Any

**Weight:** 0.015 oz., 0.4 g

### Maximum Ratings & Thermal Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	Value	Unit
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	1650	V
Maximum RMS voltage	V <sub>RMS</sub>	1150	V
Maximum DC blocking voltage	V <sub>DC</sub>	1650	V
Maximum average forward rectified current 0.375" (9.5mm) lead length at TA = 50°C	I <sub>F(AV)</sub>	1.5	A
Peak forward surge current 8.3ms single half sine wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	40	A
Maximum full load reverse current full cycle average 0.375" (9.5mm) lead length at TA = 100°C	I <sub>R(AV)</sub>	50	µA
Typical thermal resistance (Note 1)	R <sub>θJA</sub>	55	°C/W
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>	-65 to +175	°C

### Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	Value	Unit
Maximum instantaneous forward voltage at 3.0A	V <sub>F</sub>	1.6	V
Maximum DC reverse current at rated DC blocking voltage	I <sub>R</sub> TA = 25°C TA = 100°C	5.0 100	µA
Maximum reverse recovery time at I <sub>F</sub> = 0.5A, I <sub>R</sub> = 50mA	t <sub>rr</sub>	20	µs
Maximum reverse recovery time at I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, I <sub>rr</sub> =0.25A	t <sub>rr</sub> typical maximum	0.5 1.5	µs
Typical junction capacitance at 4.0V, 1MHz	C <sub>J</sub>	15	pF

**Note:** (1) Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

## Ratings and Characteristic Curves

( $T_A = 25^\circ\text{C}$  unless otherwise noted)

