

## R3000 thru R5000

### 1.Feature & Dimensions

- \* Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- \* Low leakage
- \* Low forward voltage drop
- \* High current capability
- \* Easily cleaned with Freon,Alcohol,Lsopropanol and similar solvents
- \* Deffused junction
- \* Capable of meeting environmental standards of MIL-S-19500
- \* High temperature soldering guaranteed: 260°C/10 seconds

### 2.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

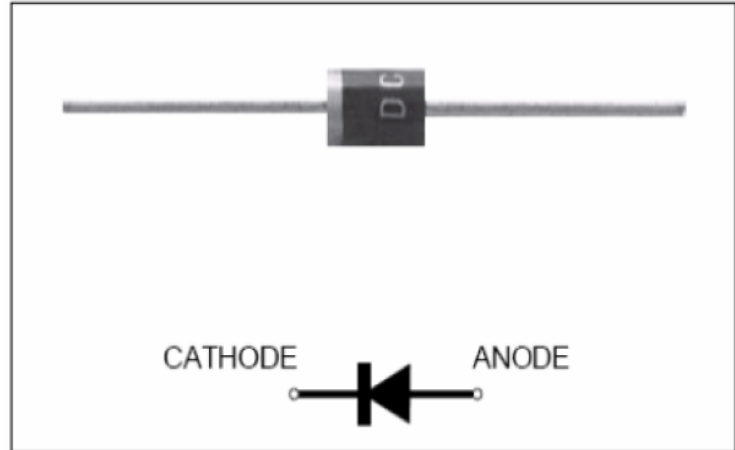
**Weight:** 0.015oz., 0.42 g

**Handling precautin:**None

### High Voltage General Purpose Plastic Rectifiers

Reverse Voltage 3000 to 5000V

Forward Current 0.2A



We declare that the material of product compliance with RoHS requirements.

### 3.Electrical Characteristic

**Maximum Ratings & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.**

Parameter Symbol	symbol	R 3000	R 4000	R 5000	Unit
Maximum repetitive peak reverse voltage	$V_{RRM}$	3000	4000	5000	V
Maximum RMS voltage	$V_{RMS}$	2100	2800	3500	V
Maximum DC blocking voltage	$V_{DC}$	3000	4000	5000	V
Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_A = 50^\circ C$	$I_{F(AV)}$	0.2			A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	25	15		A
Typical thermal resistance (Note 1)	$R_{\theta JA}$	35			$^\circ C/W$
Operating junction and storage temperature range	$T_J, T_{STG}$	-50 to +150			$^\circ C$

**Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.**

Parameter Symbol	symbol	R 3000	R 4000	R 5000	Unit
Maximum instantaneous forward voltage at $I_{F(AV)}$	$V_F$	3.0	5.0		V
Maximum DC reverse current $T_A = 25^\circ C$ at rated DC blocking voltage $T_A = 100^\circ C$	$I_R$	5.0 100			$\mu A$
Typical junction capacitance at 4.0V, 1MHz	$C_J$	15			PF

NOTES:

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

#### 4. Characteristic Curves ( TA = 25°C unless otherwise noted )

Fig. 1 - Forward Current Derating Curve

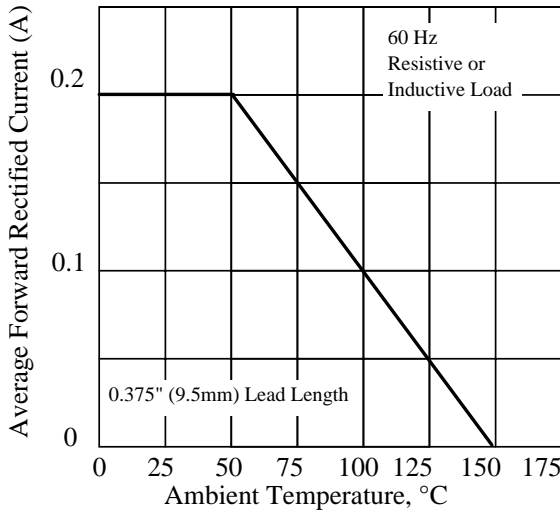


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

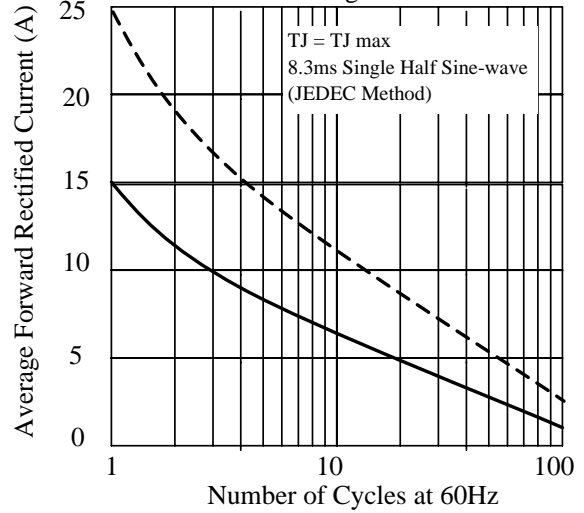


Fig 3. - Typical Instantaneous Forward Characteristics

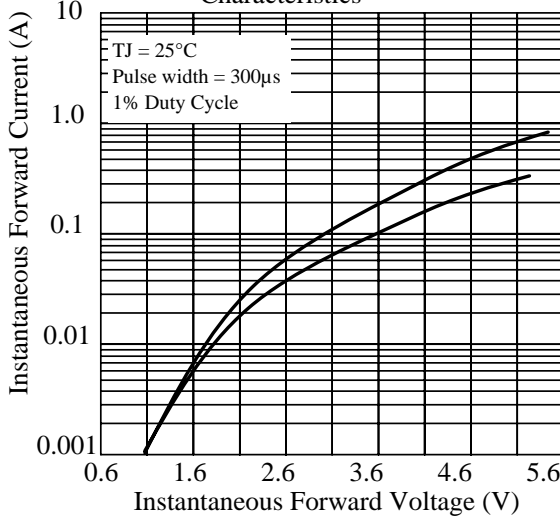


Fig 4. - Typical Reverse Characteristics

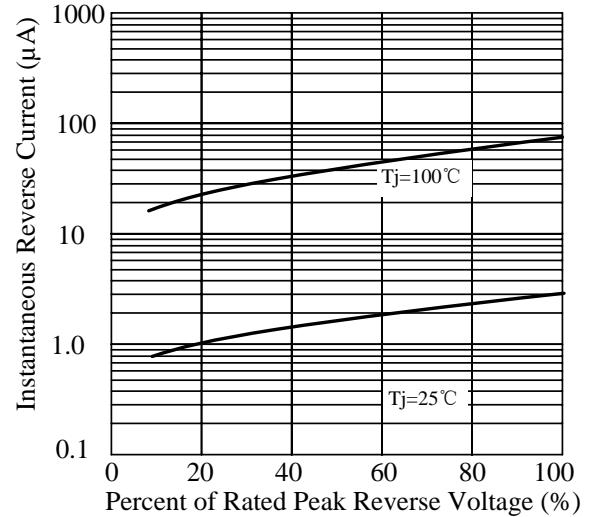


Fig 5. - typical transient thermal impedance

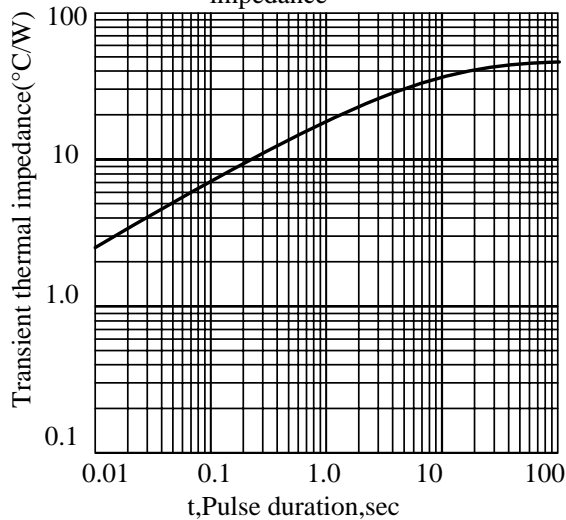
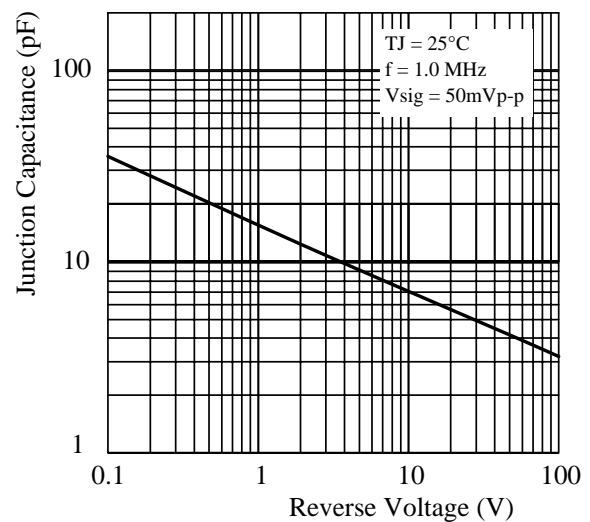


Fig 6. - Typical Junction Capacitance



**5.Package Dimensions in inches and (millimeters)**
