

## R1200 thru R2000

### 1. FEATURES

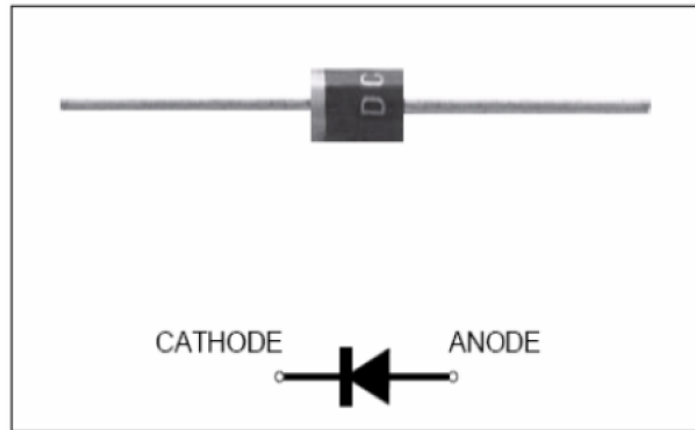
- \* Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- \* Low leakage
- \* Low forward voltage drop
- \* High current capability
- \* Easily cleaned with Freon, Alcohol and similar solvents
- \* High temperature metallurgically bonded construction
- \* Diffused junction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

### 2. Mechanical Data

- Case:** JEDEC DO-41, molded plastic body  
**Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026  
**Polarity:** Color band denotes cathode end  
**Mounting Position:** Any  
**Weight:** 0.012 oz., 0.34 g  
**Handling precaution:** None

### General Purpose High Voltage Rectifiers

Reverse Voltage 1200 to 2000V  
 Forward Current 0.2A



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

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

Parameter Symbol	symbol	R 1200	R 1500	R 1800	R 2000	Unit
Maximum repetitive peak reverse voltage	$V_{RRM}$	1200	1500	1800	2000	V
Maximum RMS voltage	$V_{RMS}$	840	1050	1260	1400	V
Maximum DC blocking voltage	$V_{DC}$	1200	1500	1800	2000	V
Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_A = 75^\circ C$	$I_{F(AV)}$	0.2				A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	25				A
Typical thermal resistance (Note 1)	$R_{\theta JA}$	55				°C/W
Operating junction and storage temperature range	$T_J, T_{STG}$	-50 to +150				°C

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

Parameter Symbol	symbol	R 1200	R 1500	R 1800	R 2000	Unit
Maximum instantaneous forward voltage at $I_{F(AV)}$	$V_F$	2.0				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

**Ratings and Characteristic Curves** (  $T_A = 25^\circ\text{C}$  unless otherwise noted )

Fig. 1 – Forward Current Derating Curve

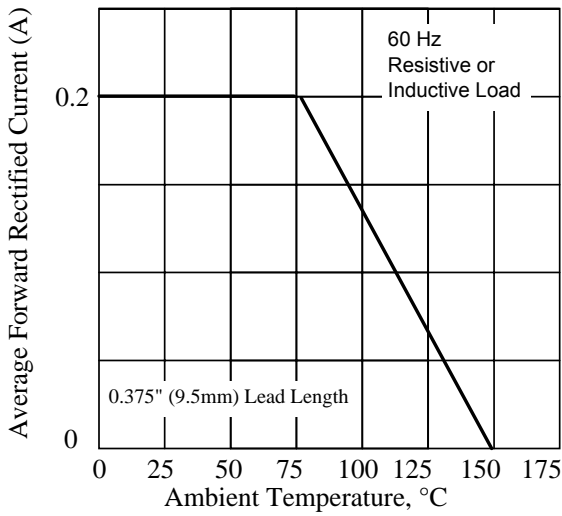


Fig. 2 – Maximum Non-repetitive Peak Forward Surge Current

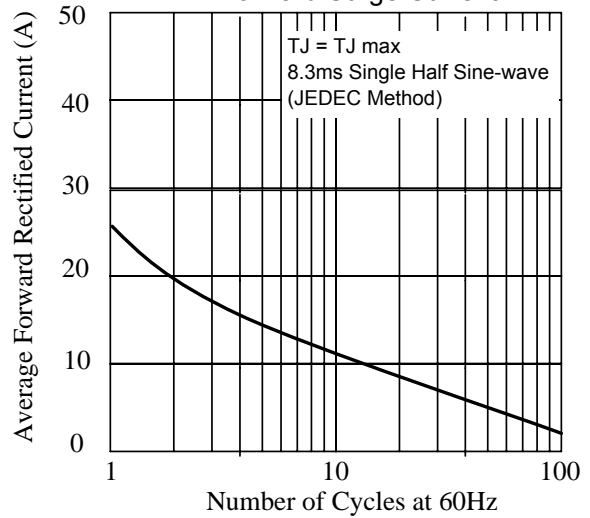


Fig 3. – Typical Instantaneous Forward Characteristics

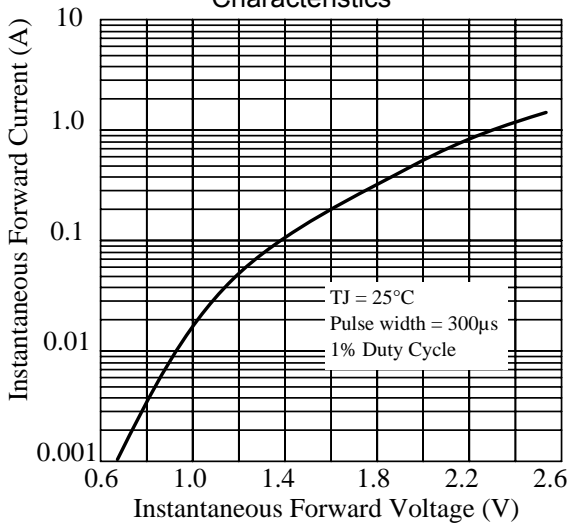


Fig 4. – Typical Reverse Characteristics

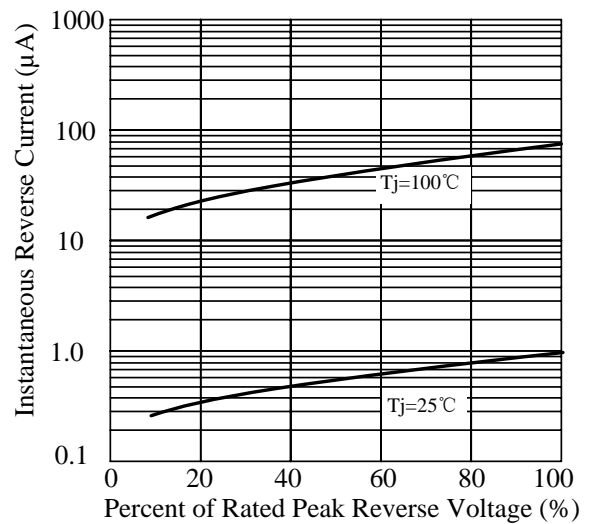


Fig 5. –typical transient thermal impedance

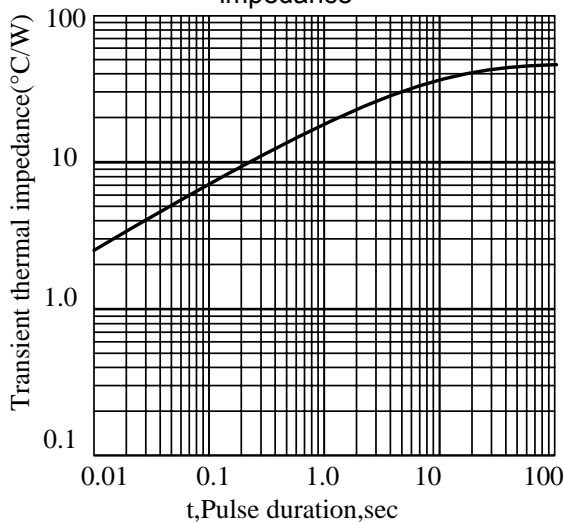
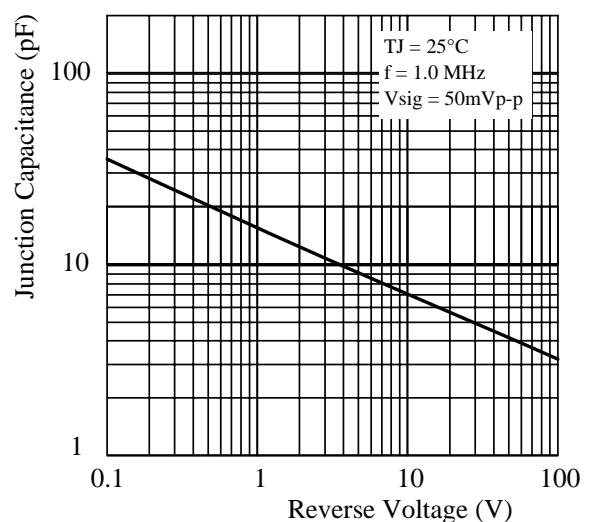


Fig 6. – Typical Junction Capacitance



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