

# RU2KGF

**SINTERED GLASS JUNCTION  
FAST SWITCHING PLASTIC RECTIFIER**  
VOLTAGE: 800V                      CURRENT: 1.0A



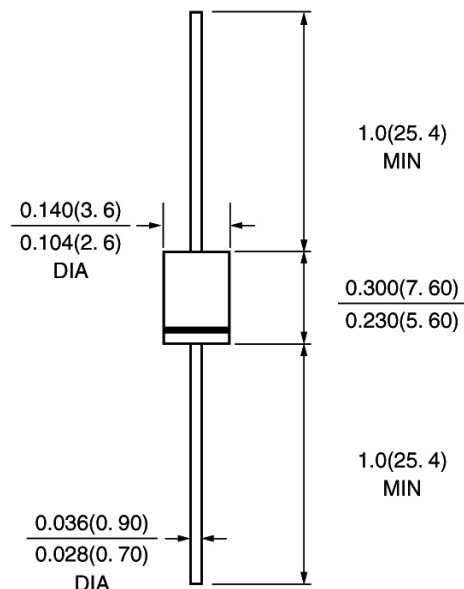
## FEATURE

High temperature metallurgically bonded construction  
Sintered glass cavity free junction  
Capability of meeting environmental standard of MIL-S-19500  
High temperature soldering guaranteed  
350°C /10sec/0.375"lead length at 5 lbs tension  
Operate at Ta =55°C with no thermal run away  
Typical Ir<0.2μA  
Low power loss, high efficient

## 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-15\DO-204AC



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)

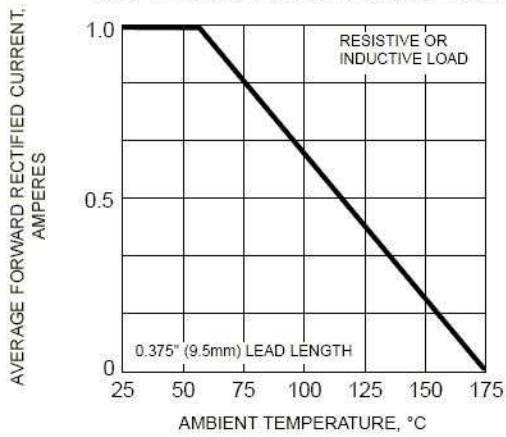
|   | SYMBOL   | RU2KGF      | units    |
|---|----------|-------------|----------|
| Maximum Recurrent Peak Reverse Voltage  | Vrrm     | 800         | V        |
| Maximum RMS Voltage   | Vrms     | 560         | V        |
| Maximum DC blocking Voltage   | Vdc      | 800         | V        |
| Maximum Average Forward Rectified Current 3/8"lead length at Ta =55°C             | If(av)   | 1.0         | A        |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load | Ifsm     | 50          | A        |
| Maximum Forward Voltage at rated Forward Current and 25°C IF=1.0A                 | Vf       | 1.5         | V        |
| Maximum full load reverse current full cycle average at 55°C Ambient              | Ir(av)   | 100         | μA       |
| Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =150°C        | Ir       | 10<br>100   | μA<br>μA |
| Typical Reverse Recovery Time (Note 1)  | Trr      | 100         | nS       |
| Typical Junction Capacitance (Note 2)   | Cj       | 50          | pF       |
| Typical Thermal Resistance (Note 3)   | R(ja)    | 20          | °C/W     |
| Storage and Operating Temperature Range   | Tstg, Tj | -65 to +175 | °C       |

### Note:

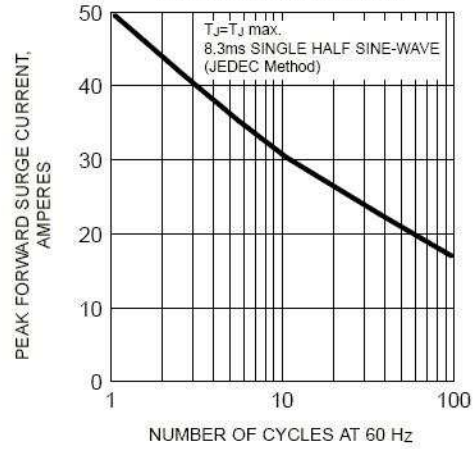
- Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
- Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
- Thermal Resistance from Junction to Ambient at 3/8"lead length, P.C. Board Mounted

# RATINGS AND CHARACTERISTIC CURVES RU2KGF

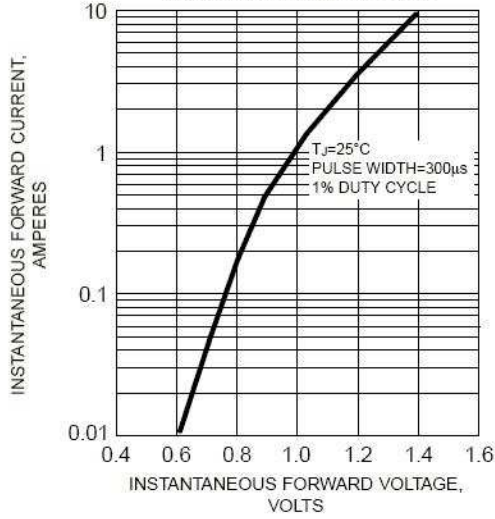
**FIG. 1 - FORWARD CURRENT DERATING CURVE**



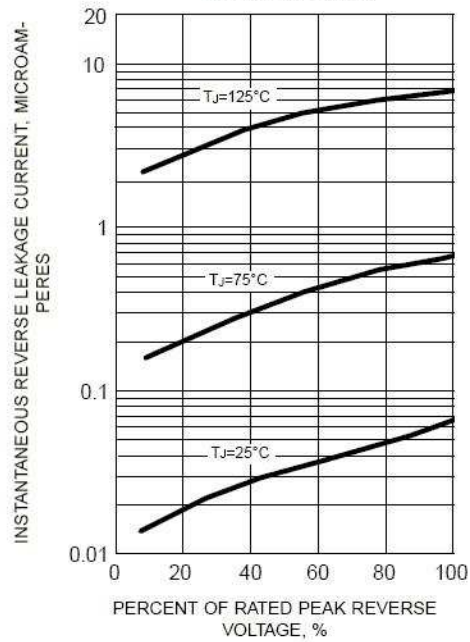
**FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



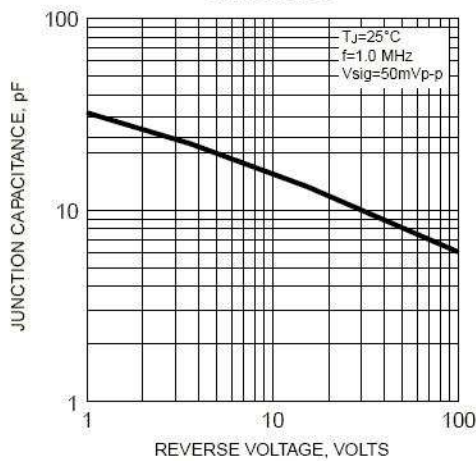
**FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG. 4 - TYPICAL REVERSE CHARACTERISTICS**



**FIG. 5 - TYPICAL JUNCTION CAPACITANCE**



**FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE**

