# RU2KGF

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

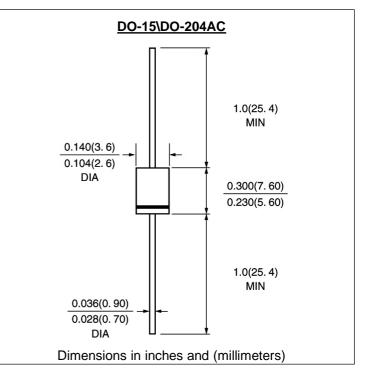


## FEATURE

High temperature metallurgically bonded construction Sintered glass cavity free junction Capability of meeting environmental standard of MIL-S-19500 High temperature soldering guaranteed  $350^{\circ}$ C /10sec/0.375"lead length at 5 lbs tension Operate at Ta =55°C with no thermal run away Typical Ir<0.2 $\mu$ A 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



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	SYMBOL	RU2KGF	unite
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	lf(av)	1.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	lfsm	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	lr(av)	100	μΑ
Maximum DC Reverse Current Ta = $25^{\circ}$ C	Ir	10	μΑ
at rated DC blocking voltage $Ta = 150^{\circ}C$		100	μΑ
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 /M
Storage and Operating Temperature Range	Tstg, Tj	-65 to +175	°C

Note:

1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A

2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc

3. Thermal Resistance from Junction to Ambient at 3/8"lead length, P.C. Board Mounted

#### RATINGS AND CHARACTERISTIC CURVES RU2KGF

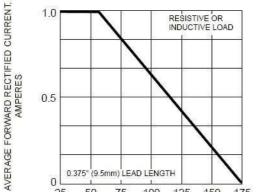
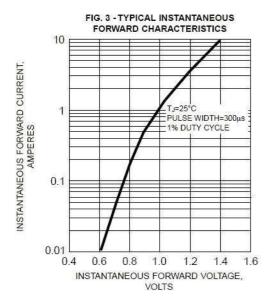
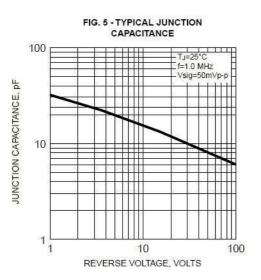


FIG. 1 - FORWARD CURRENT DERATING CURVE

0.375" (9.5mm) LEAD LENGTH 0 50 75 100 125 150 175 25 AMBIENT TEMPERATURE, °C





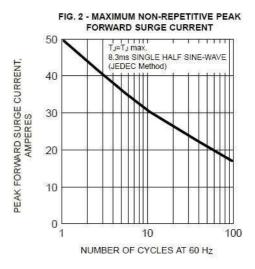


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

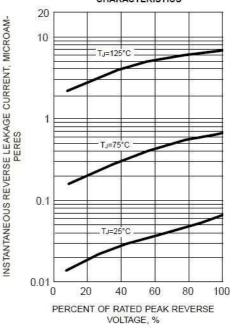
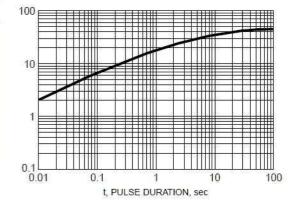


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE



TRANSIENT THERMAL IMPEDANCE (°C/W)

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