

RU1DGF

**SINTERED GLASS JUNCTION
FAST SWITCHING PLASTIC RECTIFIER**
VOLTAGE:600V **CURRENT: 1.0A**

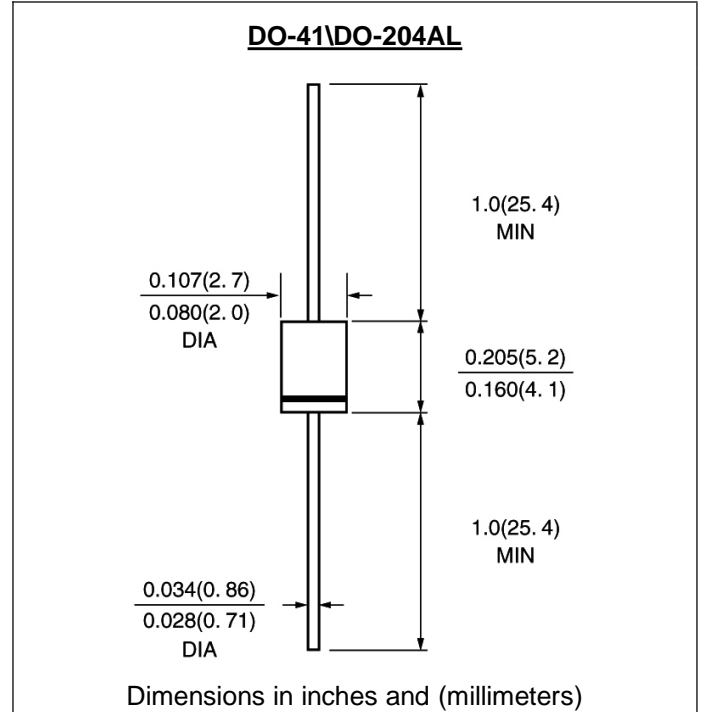


FEATURE

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



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	RU1DGF	units
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	600	V
Maximum RMS Voltage	V _{rms}	420	V
Maximum DC blocking Voltage	V _{dc}	600	V
Maximum Average Forward Rectified Current 3/8"lead length at Ta =55°C	I _{f(av)}	1.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{fsm}	30	A
Maximum Forward Voltage at rated Forward Current and 25°C	V _f	1.3	V
Maximum full load reverse current full cycle average at 55°C Ambient	I _{r(av)}	50	µA
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	I _r	5 50	µA
Maximum Reverse Recovery Time (Note 1)	T _{rr}	75	nS
Typical Junction Capacitance (Note 2)	C _j	15	pF
Typical Thermal Resistance (Note 3)	R _{th(ja)}	60	°C /W
Storage and Operating Temperature Range	T _{stg} , T _j	-65 to +175	°C

Note:

- Reverse Recovery Condition I_f =0.5A, I_r =1.0A, I_{rr} =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 RU1DGF

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FIG. 1 - MAXIMUM FORWARD CURRENT DERATING CURVE

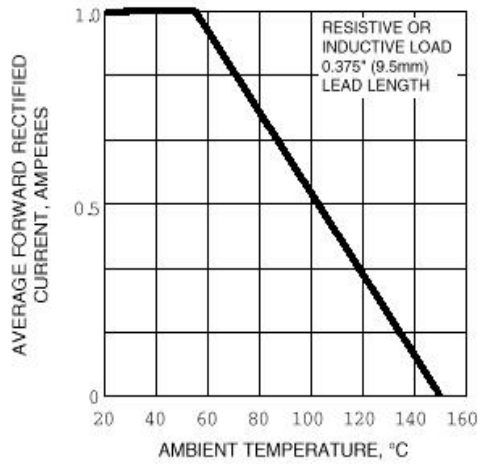


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

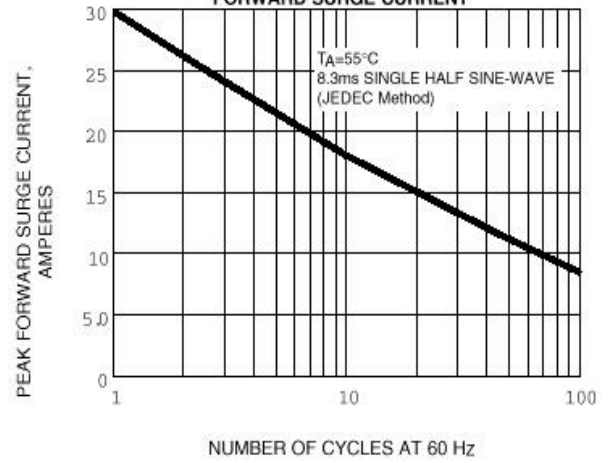


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

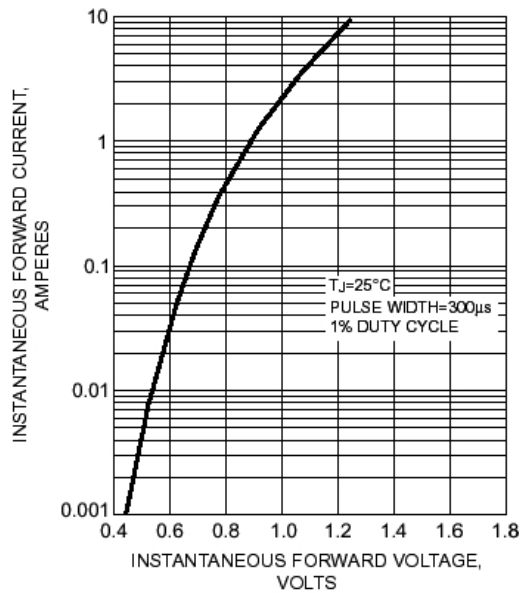


FIG. 4 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS

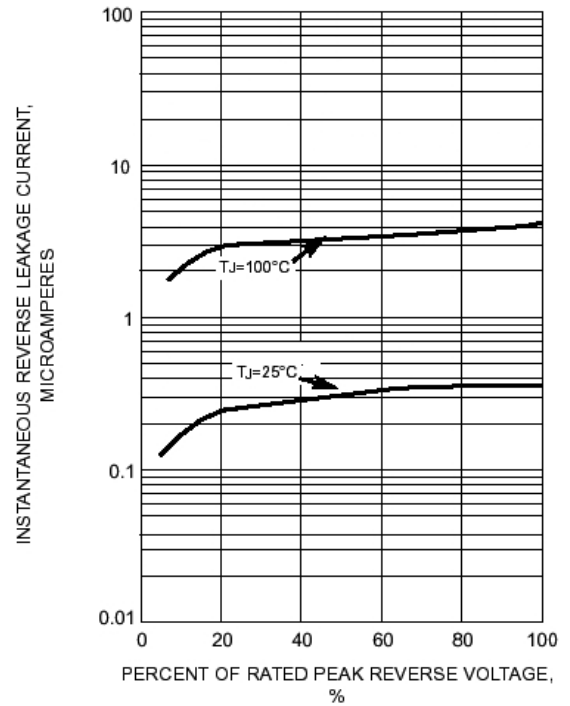


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

