

GRD07-15GP

**SINTERED GLASS JUNCTION
FAST SWITCHING PLASTIC RECTIFIER**
VOLTAGE: 1500V CURRENT: 1.5A

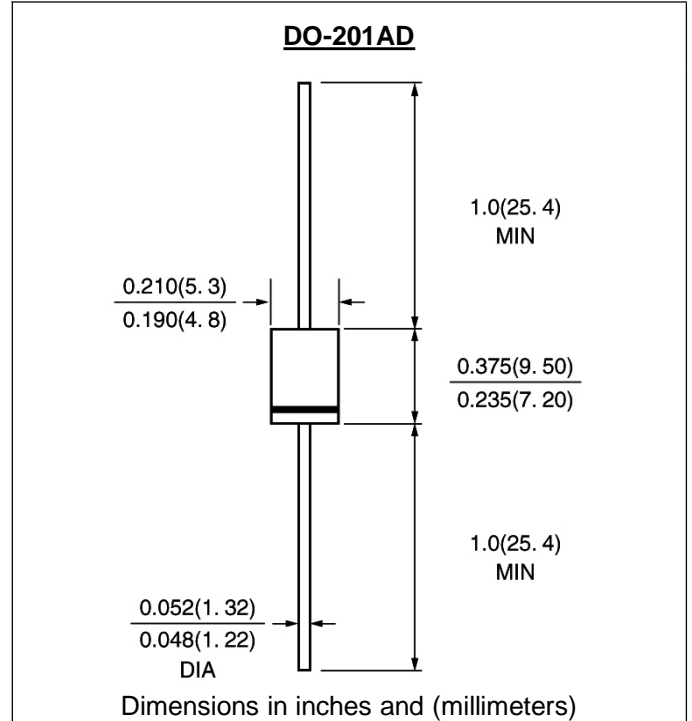


FEATURE

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<0.1µA

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	GRD07-15GP	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	1500	V
Maximum RMS Voltage	Vrms	1050	V
Maximum DC blocking Voltage	Vdc	1500	V
Maximum Average Forward Rectified Current 3/8"lead length at Ta =55°C	If(av)	1.5	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	50.0	A
Maximum Forward Voltage at rated Forward Current and 25°C at IF=4.0A	Vf	1.2	V
Maximum full load reverse current full cycle average at 55°C Ambient	Ir(av)	100	µA
Maximum DC Reverse Current at rated DC blocking voltage	Ir	10.0 200	µA
Maximum Reverse Recovery Time (Note 1)	Trr	300	nS
Typical Junction Capacitance (Note 2)	Cj	60	pF
Typical Thermal Resistance (Note 3)	Rth(ja)	20	°C /W
Storage and Operating Junction Temperature	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 GRD07-15GP

FIG. 1 - FORWARD CURRENT DERATING CURVE

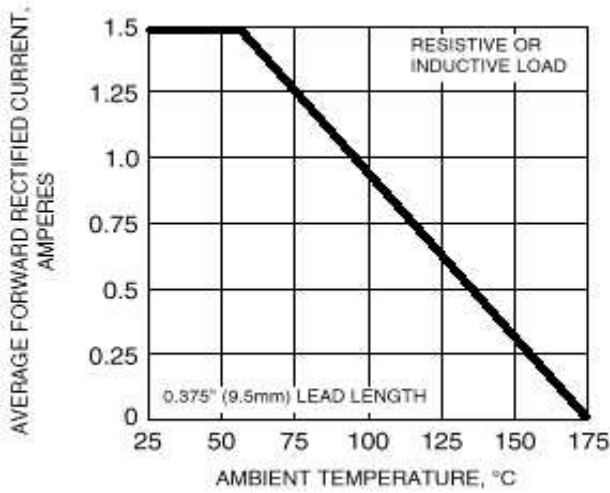


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

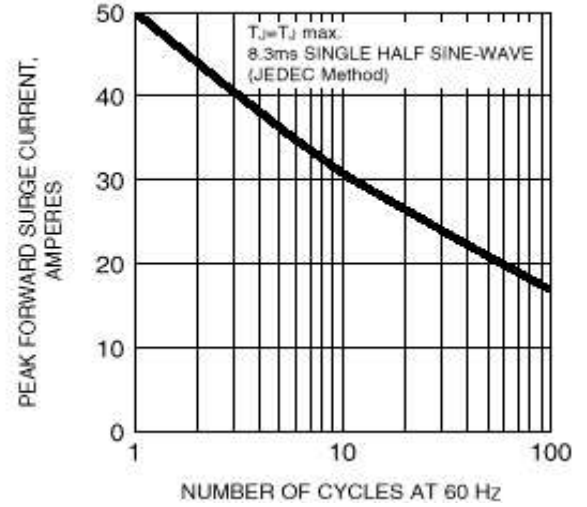


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

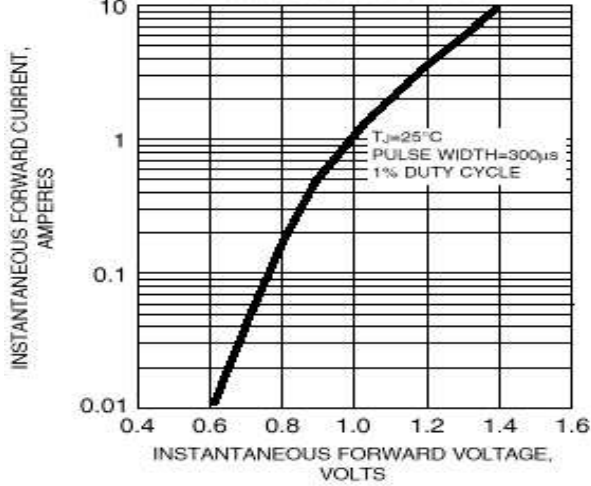


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

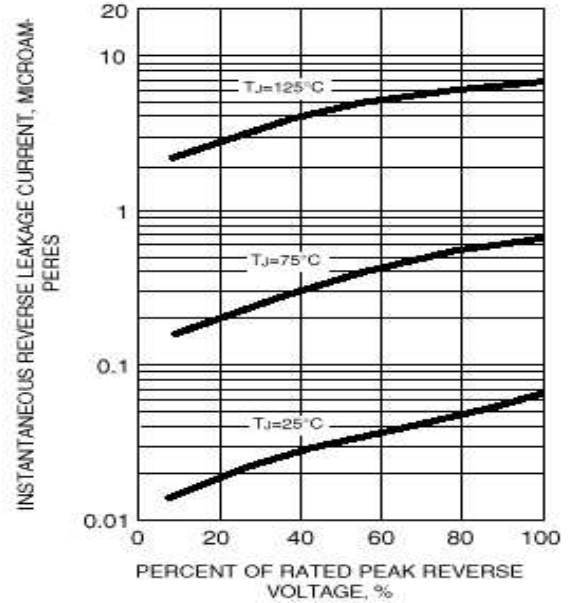


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

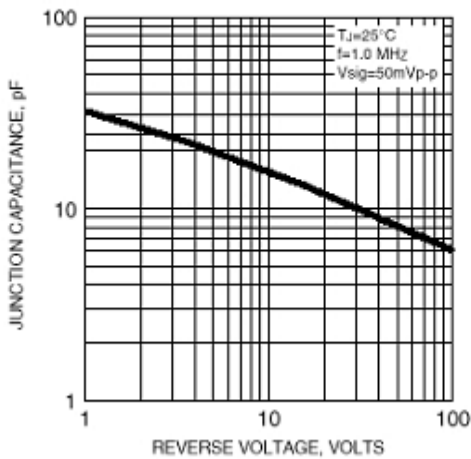


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

