

GRD07-15GP

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

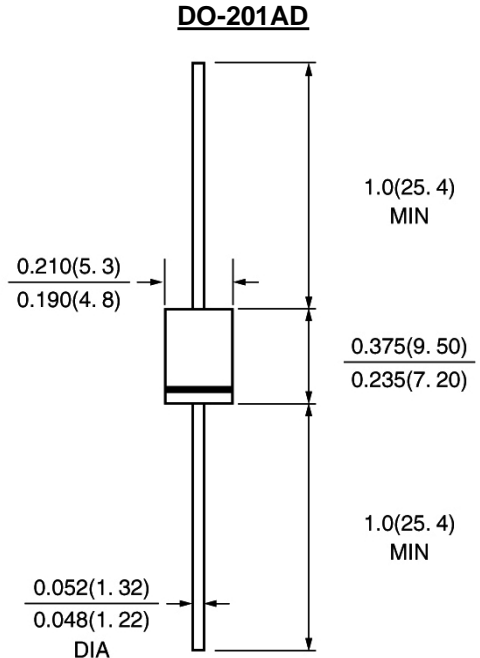


FEATURE

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 $T_a = 55^\circ\text{C}$ with no thermal run away
Typical $I_r < 0.1\mu\text{A}$

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



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	GRD07-15GP	units
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	1500	V
Maximum RMS Voltage	V _{rms}	1050	V
Maximum DC blocking Voltage	V _{dc}	1500	V
Maximum Average Forward Rectified Current 3/8" lead length at $T_a = 55^\circ\text{C}$	I _{f(av)}	1.5	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{fsm}	50.0	A
Maximum Forward Voltage at rated Forward Current and 25°C at I _F =4.0A	V _f	1.2	V
Maximum full load reverse current full cycle average at 55°C Ambient	I _{r(av)}	100	μA
Maximum DC Reverse Current at rated DC blocking voltage	I _r	10.0 200	μA
Maximum Reverse Recovery Time (Note 1)	T _{rr}	300	nS
Typical Junction Capacitance (Note 2)	C _j	60	pF
Typical Thermal Resistance (Note 3)	R _{th(ja)}	20	$^\circ\text{C}/\text{W}$
Storage and Operating Junction Temperature	T _{stg, Tj}	-65 to +175	$^\circ\text{C}$

Note:

1. Reverse Recovery Condition I_f = 0.5A, I_r = 1.0A, I_{rr} = 0.25A
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V_{dc}
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

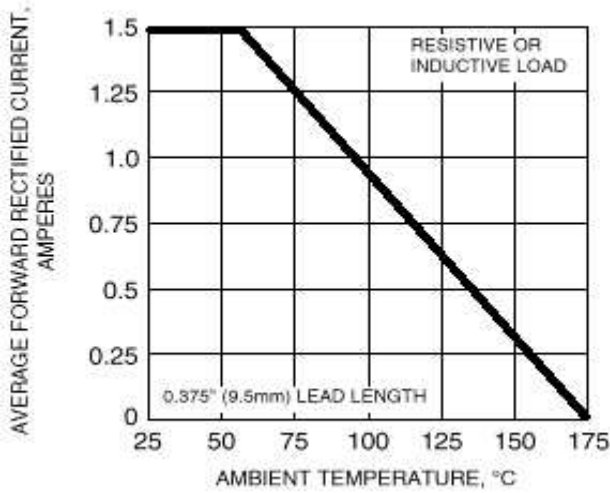


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

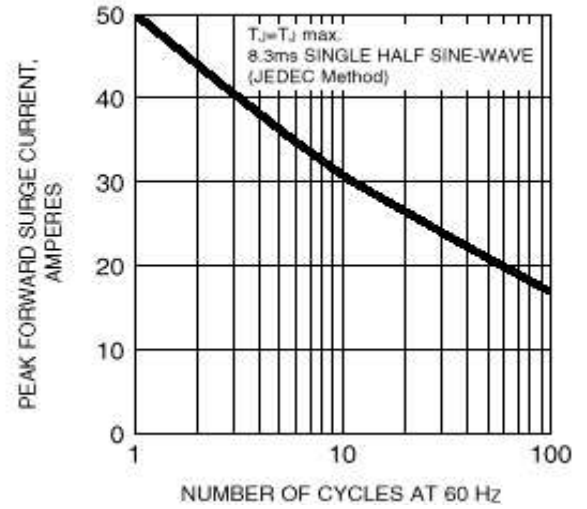


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

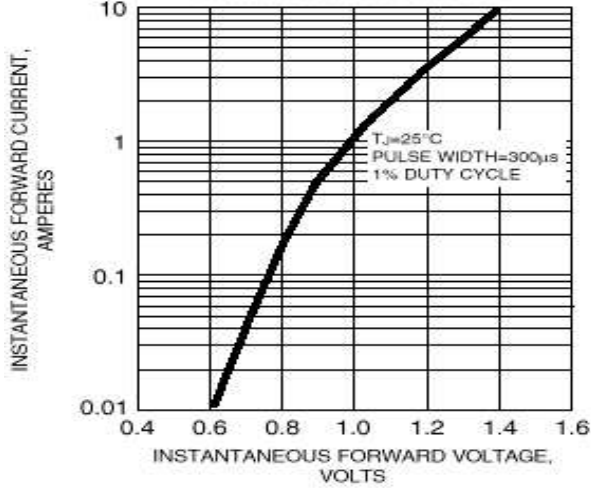


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

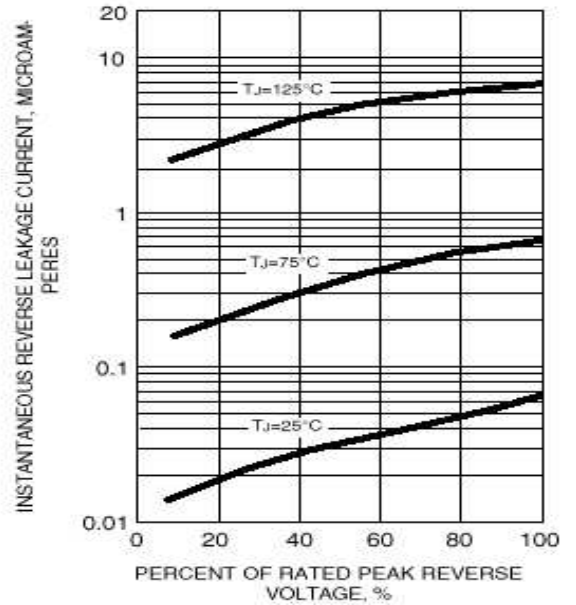


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

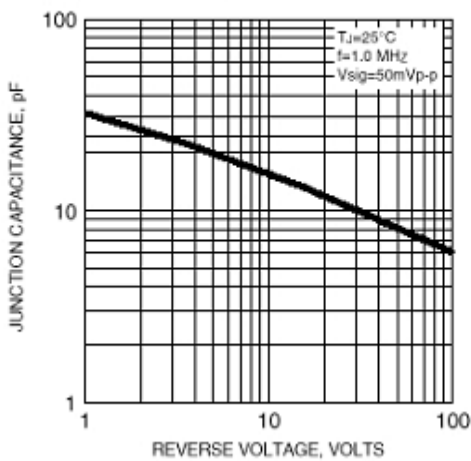


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

