

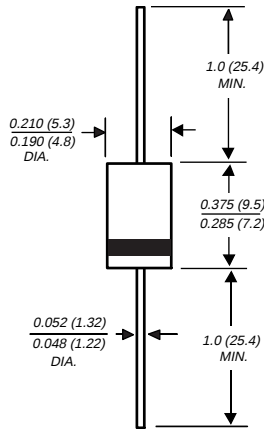
RGP25A THRU RGP25M

GLASS PASSIVATED JUNCTION FAST SWITCHING RECTIFIER

Reverse Voltage - 50 to 1000 Volts Forward Current - 2.5 Amperes

PATENTED *

DO-201AD



Dimensions in inches and (millimeters)

* Glass-plastic encapsulation technique is covered by
Patent No. 3,996,602 and brazed-lead assembly by Patent No 3,930,306



FEATURES

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ High temperature metallurgically bonded construction
- ◆ Glass passivated cavity-free junction
- ◆ 2.5 Ampere operation at $T_A=55^{\circ}\text{C}$ with no thermal runaway
- ◆ Typical I_R less than $0.2\mu\text{A}$
- ◆ Capable of meeting environmental standards of MIL-S-19500
- ◆ Fast switching for high efficiency
- ◆ High temperature soldering guaranteed:
350°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

MECHANICAL DATA

Case: JEDEC DO-201AD molded plastic over glass body
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.04 ounce, 1.12 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	RGP 25A	RGP 25B	RGP 25D	RGP 25G	RGP 25J	RGP 25K	RGP 25M	UNITS
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length at TA=55°C	l(AV)	2.5							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	100.0							Amps
Maximum instantaneous forward voltage at 2.5A	VF	1.3							Volts
Maximum DC reverse current TA=25°C at rated DC blocking voltage TA=125°C	IR	5.0 200.0							µA
Maximum full load reverse current, full cycle average 0.375" (9.5mm) lead length at TA=55°C	IR	100.0							µA
Maximum reverse recovery time (NOTE 1)	trr	150				250	500		ns
Typical junction capacitance (NOTE 2)	CJ	60.0							pF
Typical thermal resistance (NOTE 3)	RθJA	20.0							°C/W
Operating junction and storage temperature range	TJ, TSTG	-65 to +175							°C

NOTES:

- (1) Reverse recovery test conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $t_{rr}=0.25\text{A}$
- (2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts
- (3) Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

RATINGS AND CHARACTERISTIC CURVES RGP25A THRU RGP25M

AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES

