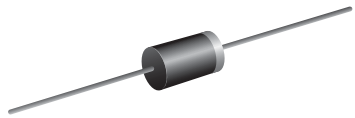
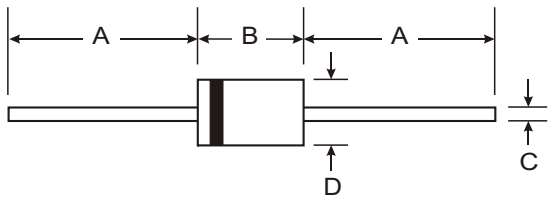
RGP30A - RGP30M

FAST RECOVERY RECTIFIER DIODES

VOLTAGE RANGE: 50 - 1000V
CURRENT: 3.0 A





Features

- High current capability
- High surge current capability
- High reliability
- Low reverse current
- Low forward voltage drop
- Fast switching for high efficiency

Mechanical Data

- Case : DO-201AD Molded plastic
- Epoxy : UL94V-O rate flame retardant
  Lead : Axial lead solderable per MIL-STD-202,
  Method 208 guaranteed
- Polarity : Color band denotes cathode end
- Mounting position : Any
- Weight : 1.16 grams

RoHS COMPLIANT

DO-201AD		
Dim	**Min**	**Max**
A	25.40	—
B	8.50	9.53
C	0.96	1.06
D	4.80	5.21
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics

T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	RGP 30A	RGP 30B	RGP 30D	RGP 30G	RGP 30J	RGP 30K	RGP 30M	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Current 0.375"(9.5mm) Lead Length Ta = 55 °C	$I_{F(AV)}$	3.0							A
Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	I_{FSM}	200							A
Maximum Peak Forward Voltage at I_F = 3 A	V_F	1.3							V
Maximum DC Reverse Current Ta = 25 °C	I_R	10							µA
at Rated DC Blocking Voltage Ta = 100 °C	$I_{R(H)}$	150							µA
Maximum Reverse Recovery Time (Note 1)	Trr	150			250	500		500	ns
Typical Junction Capacitance (Note 2)	C_J	60							pf
Junction Temperature Range	T_J	- 65 to + 150							°C
Storage Temperature Range	T_{STG}	- 65 to + 150							°C

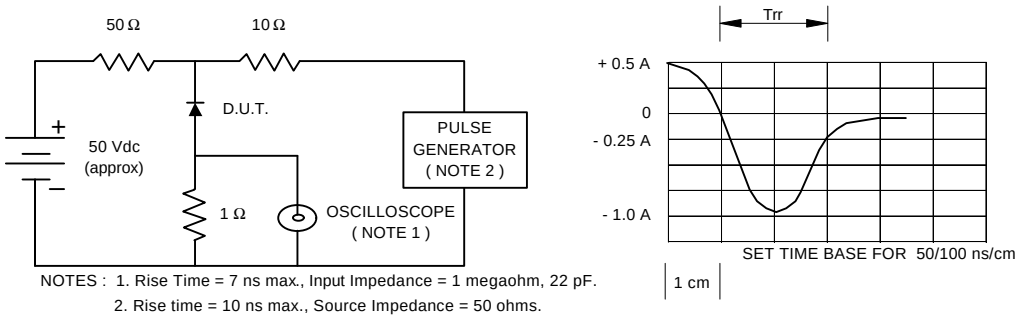
Notes :

(1) Reverse Recovery Test Conditions : I_F = 0.5 A, I_R = 1.0 A, Irr = 0.25 A.

(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 V_{DC}

RATING AND CHARACTERISTIC CURVES RGP30A - RGP30M

FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



NOTES : 1. Rise Time = 7 ns max., Input Impedance = 1 megaohm, 22 pF.
2. Rise time = 10 ns max., Source Impedance = 50 ohms.
3. All Resistors = Non-inductive Types.

FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

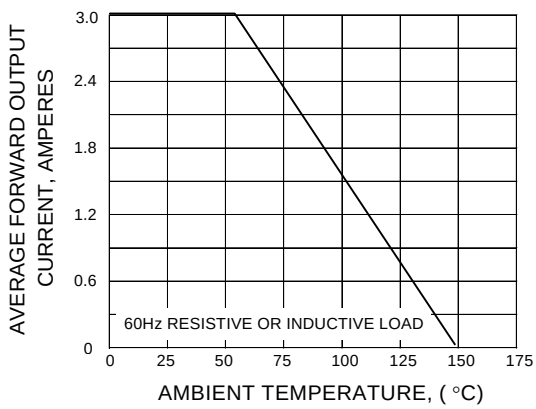


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

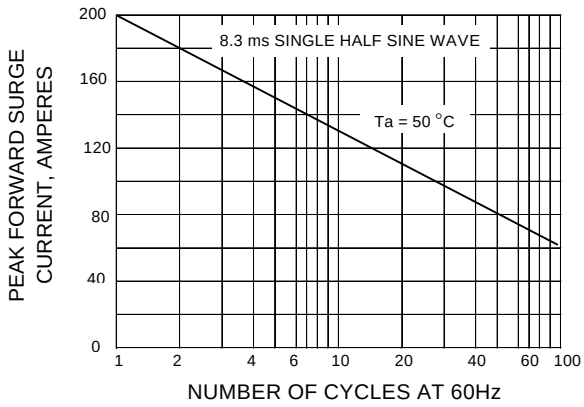


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

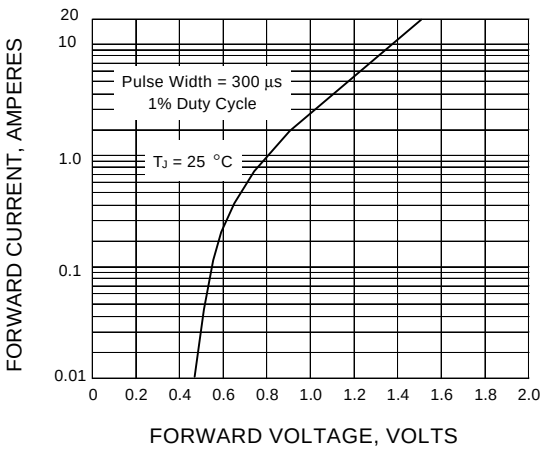


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

