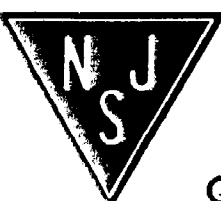


GP30A THRU GP30M

3.0 AMPS. Glass Passivated Junction Plastic Rectifiers

<p>Features</p> <ul style="list-style-type: none"> ◆ High temperature metallurgically bonded construction ◆ Plastic material used carries Underwriters Laboratory Classification 94V-0 ◆ Glass passivated cavity-free junction ◆ Capable of meeting environmental standards of MIL-S-19500 ◆ 3.0 amperes operation at $T_A=55^{\circ}\text{C}$ and with no thermal runaway ◆ Typical I_R less than 0.1 μA ◆ High temperature soldering guaranteed: $350^{\circ}\text{C} / 10$ seconds, 0.375"(9.5mm) lead length, 5 lbs. (2.3kg) tension <p>Mechanical Data</p> <ul style="list-style-type: none"> ◆ Case: JEDEC DO-201AD molded plastic over glass body ◆ Lead: Plated axial leads, solderable per MIL-STD- 750, Method 2026 ◆ Polarity: Color band denotes cathode end ◆ Mounting position: Any ◆ Weight: 0.048 ounce, 1.28 grams 	<p>DO-201AD</p> <p>Dimensions in inches and (millimeters)</p>								
<p>Maximum Ratings and Electrical Characteristics</p> <p>Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%</p>									
Type Number	Symbol	GP 30A	GP 30B	GP 30D	GP 30G	GP 30J	GP 30K	GP 30M	Units
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 Rectified Current .375"(9.5mm) Lead Length at $T_A=55^{\circ}\text{C}$	$I_{(AV)}$	3.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	125							A
Maximum Instantaneous Forward Voltage @3.0A	V_F	1.2			1.1				V
Maximum DC Reverse Current @ $T_A=25^{\circ}\text{C}$ at Rated DC Blocking Voltage @ $T_A=150^{\circ}\text{C}$	I_R				5.0				μA
					100				μA
Maximum Full Load Reverse Current, Full Cycle Average .375"(9.5mm) Lead Length @ $T_A=55^{\circ}\text{C}$	HT_{IR}				100				μA
Typical Junction Capacitance (Note 1)	C_j				40.0				pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$				35				$^{\circ}\text{C}/\text{W}$
Operating and Storage Temperature Range	T_J, T_{STG}	- 65 to + 175							$^{\circ}\text{C}$

Notes: 1. Measured at 1 MHz and Applied Reverse Voltage of 4.0 Volts D.C.
 2. Mount on Cu-Pad Size 16mm x 16mm on P.C.B.



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