



FR301G THRU FR307G

PINGWEI ENTERPRISE 3.0 AMPS .GLASS PASSIVATED FAST RECOVERY RECTIFIERS

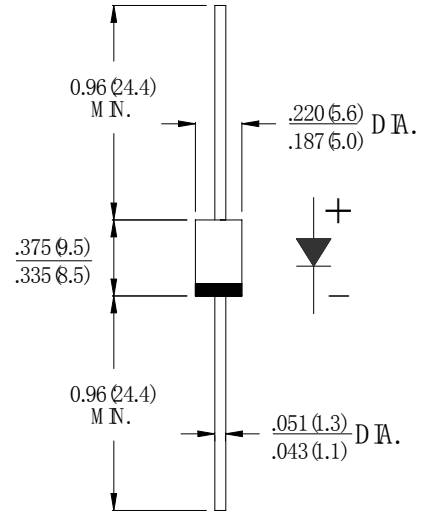
FEATURE

- . Fast switching
- . High current capability
- . Low forward voltage drop
- . Low power loss, high efficiency
- . High surge capability
- . High temperature soldering guaranteed
260°C /10sec/ 0.375" lead length at 5 lbs tension

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

DO-27/DO-201AD



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number	SYMBOL	FR301G	FR302G	FR303G	FR304G	FR305G	FR306G	FR307G	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 $T_A = 55^\circ\text{C}$	$I_{F(AV)}$	3.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	90.0							A
Maximum Instantaneous forward Voltage at 3.0A DC	V_F	1.3							V
Maximum DC Reverse Current @ $T_A = 25^\circ\text{C}$ at rated DC blocking voltage @ $T_A = 125^\circ\text{C}$	I_R	5.0 100.0							μA
Maximum Reverse Recovery Time (Note 1)	t_{rr}	150			250		500		ns
Typical Junction Capacitance (Note 2)	C_J	60							pF
Typical Thermal Resistance (Note 3)	$R_{(JA)}$	50							$^\circ\text{C/W}$
Storage Temperature	T_{STG}	-55 to +150							$^\circ\text{C}$
Operation Junction Temperature	T_J	-55 to +150							$^\circ\text{C}$

Note:

1. Test Conditions: $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $I_{RR} = 0.25\text{A}$
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. Thermal Resistance from Junction to Ambient at 0.375" (9.5mm) lead length, vertical P.C. Board Mounted.