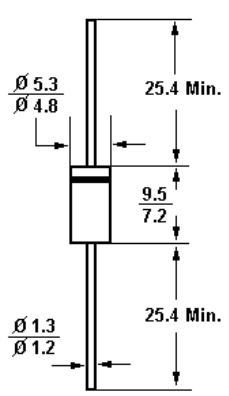
FR301 THRU FR307

FAST RECOVERY RECTIFIERS
Reverse Voltage – 50 to 1000 Volts
Forward Current – 3.0 Ampere

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Fast switching for high efficiency
- Construction utilizes void-free molded plastic technique
- 3.0 ampere operation at T_A=75°C with no thermal runaway.
- High temperature soldering guaranteed: 250°C/10 seconds, 0.375"(9.5mm) lead length, 5 lbs (2.3kg) tension.

DO-201AD



Dimnsions in mm

Mechanical Data

- **Case:** Molded plastic, DO-201AD.
- **Terminals:** Plated axial leads, solderable per MIL-STD-750, method 2026
- **Polarity:** Color band denotes cathode end.
- **Mounting Position:** Any.

Absolute Maximum Ratings and Characteristics @ 25°C unless otherwise specified.

	Symbols	FR301	FR302	FR303	FR304	FR305	FR306	FR307	FR307 -STR	Units
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	1000	Volts
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	700	Volts
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	1000	Volts
Average forward rectified current at T_A = 75 °C	$I_{(AV)}$	3								Amps
Peak forward surge current 8.3mS single half sine-wave	I_{FSM}	200								Amps
Maximum instantaneous forward voltage at I_{FM}=3.0A , T_A=25°C(Note 3)	V_F	1.3								Volts
Maximum DC reverse current T_A = 25 °C at rated DC blocking voltage T_A = 55°C	I_R	10 150								μA
Maximum reverse recovery time (Note 1)	T_{rr}	150				250	500		250	nS
Typical junction capacitance (Note 2)	C_J	65								pF
Operating and storage temperature range	T_J ,T_S	-65 to +150								°C

1) Reverse recovery test conditions: I_F=0.5A, I_R=1A, I_{rr}=0.25A
2) Measured at 1MH$_Z$ and applied reverse voltage of 4volts
3) Pulse test: pulse width 300 uSec, Duty cycle 1%.