FR301 THRU FR308

FAST RECOVERY RECTIFIER

REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 3.0 Ampere

FEATURES

- ◆Fast speed switching
- ◆Low forward voltage drop
- ◆Low leakage current
- ◆High forward surge capability
- High reliability
- ◆High temperature soldering guaranteed:

260°C/10 seconds,0.375" (9.5mm)lead length at

5 lbs(2.3kg) tension

Mechanical Data

◆Case: Transfer molded plastic

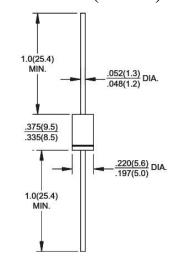
◆Epoxy: UL94V-0 rate flame retardant

◆Polarity: Color band denotes cathode end

◆Lead: Plated axial lead, solderable per MIL-STD-202E method 208°C

◆Mounting position: Any

DO-201AD(DO-27)



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

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

	SYMBOL	FR301	FR302	FR303	FR304	FR305	FR306	FR308	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at $T_A=55^{\circ}\mathrm{C}$	I(AV)				3.0				Amps
Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load (JEDEC method)	I _{FSM}	150							Amps
Maximum Instantaneous Forward Voltage at 3.0A	$V_{\rm F}$	1.2							Volts
Maximum DC Reverse Current $T_A=25^{\circ}C$ at rated DC Blocking voltage $T_A=100^{\circ}C$	I_R	5.0 100							μΑ
Maximum Reverse Recovery Time (NOTE1)	T_{RR}	150 250 500				00	nS		
Typical Junction Capacitance (NOTE 2)	C_{J}	60							pF
Typical Thermal Resistance (NOTE 3)	$R_{ heta JA}$	40							°C/W
Operating and Storage Temperature Range	T _J , Tstg	-55 to +150							$^{\circ}$

Note: 1.Reverse Recovery Test Conditions:If=0.5A,Ir=1.0A,Irr=0.25A.

- 2.Measured at 1.0MHz and applied reverse voltage of 4.0 Volts.
- 3. Thermal Resistance From Junction to Ambient at. 375" (9.5mm) lead length, P.C. board mounted.

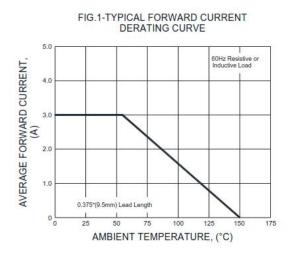


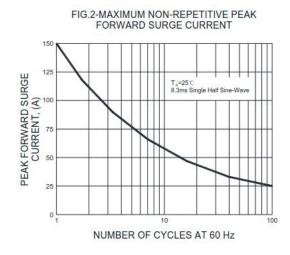
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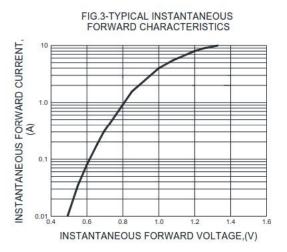
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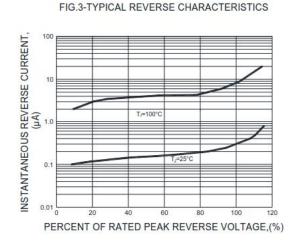
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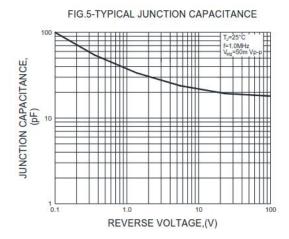
RATING AND CHARACTERISTIC CURVES FR301 THRU FR308

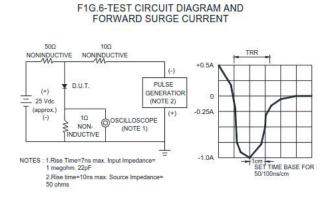












Note: Specifications are subject to change without notice. For more detail and update, please visit our website.