



Preliminary Data Sheet

FR301 THRU FR307 3.0AMP. Fast Recovery Rectifiers

VOLTAGE:50 TO 1000V

CURRENT:3.0A



AXIAL LEAD
DO-201AD

Specification Features:

- Case: Epoxy, Molded
- Weight: 1.20Gram (Approximately)
- High current capability, Low leakage current
- High surge current capability
- Finish: All External Surfaces Corrosion Resistant And Terminal Leads Are Readily Solderable
- Lead And Mounting Surface Temperature For Soldering Purposed:
260°C Max. For 10 Seconds 1/16 Inch From Case
- RoHS Compliant
Cathode Indicated By Polarity Band

DEVICE MARKING DIAGRAM



FR30X : Device Name FR301~ FR307

KEL : KEL Logo

Absolute Maximum Ratings $T_A = 25^\circ\text{C}$ unless otherwise noted

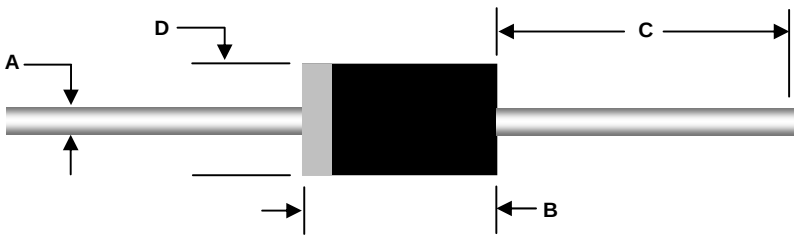
Parameter	Symbol	FR 301	FR 302	FR 303	FR 304	FR 305	FR 306	FR 307	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum DC Blocking Voltage	V_R	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectifier Current. (0.375" Lead Length @ $T_A=75^\circ\text{C}$)	$I_{F(AV)}$	3.0							A
Non-repetitive Peak Forward Surge Current. (8.3mS Single Half Sine-wave)	I_{FSM}	150							A
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-65 to +150							$^\circ\text{C}$
Thermal Resistance (Junction to Ambient) (Note 1)	$R_{\theta JA}$	20							$^\circ\text{C/W}$

Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

Parameter	Symbol	FR 301	FR 302	FR 303	FR 304	FR 305	FR 306	FR 307	Units
Reverse Current @V _R	I _R	5							uA
Forward Voltage @3A	V _F	1.3							V
Maximum Reverse Recovery Time (Note 2)	T _{RR}	150				250	500		nS
Total Capacitance @VR=4V, f=1MHz	C _T	50							pF

NOTE: (1) Thermal resistance from junction to ambient at 0.375" lead length, vertical P.C. board mounted
 (2) Reverse Recovery Test Conditions: $I_F=0.5A$, $I_R=1.0A$, $I_{RR}=0.25A$

Package Outline

Package	Case Outline				
DO-201AD					
	DIM	DO-201AD			
		Millimeters		Inches	
		Min	Max	Min	Max
	A	1.19	1.30	0.046	0.052
	B	7.20	9.60	0.285	0.375
	C	25.40	---	1.000	---
	D	4.80	5.30	0.190	0.210