KEL®

Preliminary Data Sheet

FR101 THRU FR107

1.0AMP. Fast Recovery Rectifiers

AXIAL LEAD
DO-41

VOLTAGE:50 TO 1000V **CURRENT:1.0A**

Specification Features:

- Case: Epoxy, Molded
- Weight: 0.4Gram (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℃ Max. For 10 Seconds 1/16 Inch From Case
- RoHS Compliant

Cathode Indicated By Polarity Band

DEVICE MARKING DIAGRAM

FR10X : Device Name FR101~ FR107
KEL : KEL Logo

Absolute Maximum Ratings

T_A = 25°C unless otherwise noted

Parameter	Symbol	FR 101	FR 102	FR 103	FR 104	FR 105	FR 106	FR 107	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℃)	$I_{F(AV)}$	1.0							A
Non-repetitive Peak Forward Surge Current. (8.3mS Single Half Sine-wave)	I_{FSM}	30							A
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-65 to +150							°C
Thermal Resistance (Junction to Ambient) (Note 1)	$R_{\theta JA}$	65							°C/W

Electrical Characteristics

T_A = 25°C unless otherwise noted

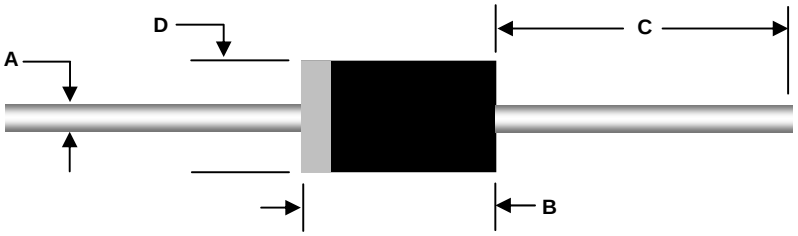
Parameter	Symbol	FR 101	FR 102	FR 103	FR 104	FR 105	FR 106	FR 107	Units
Reverse Current @V_R	I_R	5							uA
Forward Voltage @1A	V_F	1.3							V
Maximum Reverse Recovery Time (Note 2)	T_{RR}	150				250	500		nS
Total Capacitance @VR=4V, f=1MHz	C_T	15							pF

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-41



DIM	DO-41			
	Millimeters		Inches	
	Min	Max	Min	Max
A	0.69	0.90	0.027	0.034
B	4.20	5.20	0.166	0.205
C	25.40	---	1.000	---
D	2.00	2.70	0.080	0.107