FAIRCHILD
A Schlumberger Company

FJT1100/FJT1101

T-01-09

Ultra Low Leakage Diodes

- I_R...1.0 pA (MAX) @ 5V (FJT1100)
- BV...20 V (MIN) (FJT1100)

PACKAGES

FJT1100	DO-7
FJT1101	DO-7

ABSOLUTE MAXIMUM RATINGS (Note 1)

Temperature

Storage Temperature Range	−55°C to +200°C
Maximum Junction Operating Temperature	+175°C
Lead Temperature	+260°C

Power Dissipation (Note 2)

Maximum Total Power Dissipation at 25°C Ambient	250 mW
Linear Power Derating factor (from 25°C)	1.67 mW/°C

Maximum Voltage and Current

WIV	Working Inverse Voltage	FJT1100	25 V
		FJT1101	15 V
I_f	Continuous Forward Current		150 mA

ELECTRICAL CHARACTERISTICS (25°C Ambient Temperature unless otherwise noted)

SYMBOL	CHARACTERISTIC		MIN	MAX	UNITS	TEST CONDITIONS
BV	Breakdown Voltage	FJT1100	30		V	I_R = 5.0 μA
		FJT1101	20		V	I_R = 5.0 μA
I_R	Reverse Current	FJT1100		1.0	pA	V_R = 5.0 V
				10	pA	V_R = 15V
		FJT1101		5.0	pA	V_R = 5.0V
				15	pA	V_R = 15V
V_F	Forward Voltage	FJT1100		1.05	V	I_F = 50 mA
		FJT1101		1.10	V	I_F = 50 mA
C	Capacitance	FJT1100		1.5	pF	V_R = 0, f = 1MHz
		FJT1101		1.8	pF	V_R = 0, f = 1MHz

NOTES:
1. These are limiting values above which the serviceability of the diode may be impaired.
2. These are steady state limits. The factory should be consulted on applications involving pulsed of low duty-cycle operation.
3. For product family characteristic curves and applications information, refer to Chapter 4, D6.