

FAIRCHILD

A Schlumberger Company

FJT1100/FJT1101
Ultra Low Leakage Diodes

T-01-09

- 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	$I_R = 5.0 \mu A$
		FJT1101	20	V	$I_R = 5.0 \mu A$
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 or low duty-cycle operation.
3. For product family characteristic curves and applications information, refer to Chapter 4, D6.