

FAIRCHILD SEMICONDUCTOR

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**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**

$V_{IV}$  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.

