

## Information Only Data Sheet

FINAL REVERSE CURRENT & FORWARD VOLTAGE LIMITS MIGHT BE INCREASED SLIGHTLY

### General Description:

An Ultra Low Leakage Diode in the DO-35 package.  
The forward voltage is typically greater than 0.5 volts  
at 1.0 micro-ampere.

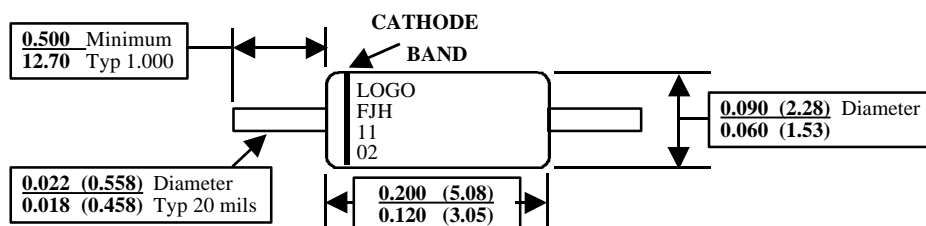
This product is light sensitive, any damage to the body  
coating will affect the reverse leakage when exposed to  
light.

## Ultra Low Leakage Diode

### Absolute Maximum Ratings\* TA = 25°C unless otherwise noted

Sym	Parameter	Value	Units
T <sub>stg</sub>	Storage Temperature	-55 to +200	°C
T <sub>J</sub>	Operating Junction Temperature	175	°C
P <sub>D</sub>	Total Power Dissipation at T <sub>A</sub> = 25°C	250	mW
	Linear Derating Factor from T <sub>A</sub> = 25°C	1.67	mW/°C
R <sub>OJA</sub>	Thermal Resistance Junction-to-Ambient	300	°C/W
W <sub>IV</sub>	Working Inverse Voltage	25	V
I <sub>F</sub>	DC Forward Current (I <sub>F</sub> )	150	mA

\*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired



### Electrical Characteristics TA = 25°C unless otherwise noted

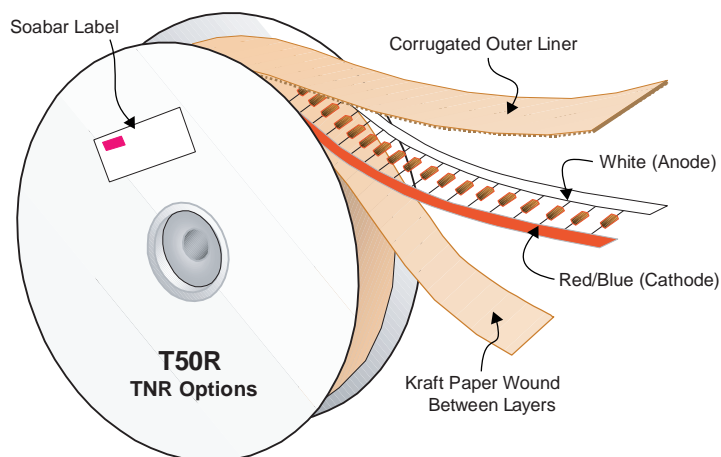
SYM	CHARACTERISTICS	MIN	MAX	UNITS	TEST CONDITIONS
B <sub>V</sub>	Breakdown Voltage	30		V	I <sub>R</sub> = 5.0 uA
I <sub>R</sub>	Reverse Leakage		100	pA	V <sub>R</sub> = 25 V
V <sub>F</sub>	Forward Voltage	500 650 750	600 750 850 1.10	mV mV mV V	I <sub>F</sub> = 1.0 uA I <sub>F</sub> = 100 uA I <sub>F</sub> = 1.0 mA I <sub>F</sub> = 10 mA
C <sub>T</sub>	Diode Capacitance		3.5	pF	V <sub>R</sub> = 0 V, f = 1.0 MHz

## DO-35 Tape and Reel Data



### DO-35 Packaging

Configuration: Figure 1.0



### DO-35 Packaging

Information Table: Figure 2.0

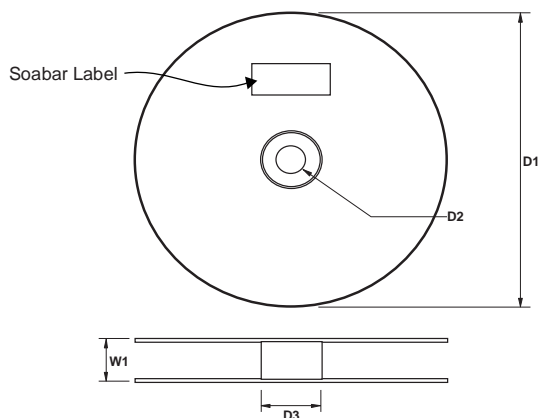
DO-35 Packaging Information			
Packaging Option	T50R	T50A	Standard (no flow code)
Packaging type	TNR	Ammo	Bag
Qty per Reel/Tube/Bag	10,000	5,000	500
Reel Size (inch diameter)	13	-	-
Inside Tape Spacing (mm)	52	52	-
Int Box Dimension (mm)	254x79x794	406x267x184	279x133x108
Max qty per Box	30,000	50,000	5,000
Weight per unit (gm)	0.137	0.137	0.137
Weight per Reel/Ammo (kg)	2.23	0.800	-
Note/Comments			Bulk

Soabar Label sample

<b>FAIRCHILD</b> SEMICONDUCTOR		P.O. No.	
TYPE	IN5225A	MARK	BLK-BRN
REV	A2	PART No.	
PKG		EC No.	
QTY	10,000	M.O. No.	OX5046F035
Q.C.		DATE	D9903
MFD. UNDER US PAT 3,025,589 & OTHER US PATS & APPLICATIONS			

### DO-35 Reel Dimensions:

Figure 3.0



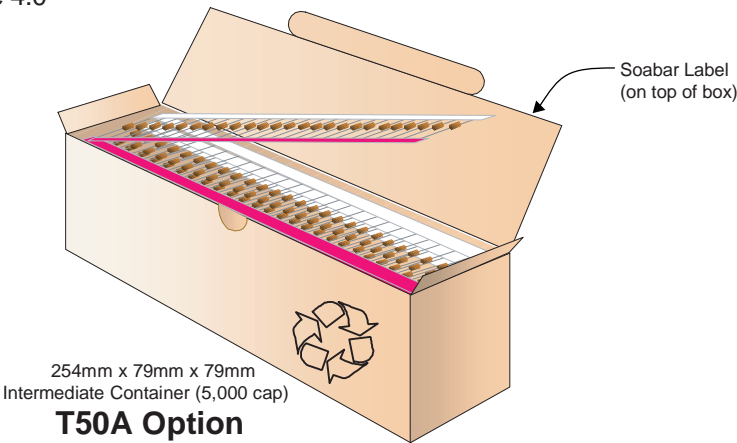
#### REEL DIMENSIONS

ITEM DESCRIPTION	SYMBOL	MINIMUM	MAXIMUM
Reel Diameter	D1	10.375	10.625
Arbor Hole Diameter (Standard)	D2	1.245	1.255
Core Diameter	D3	3.190	3.310
Flange to Flange Inner Width	W1		3.400

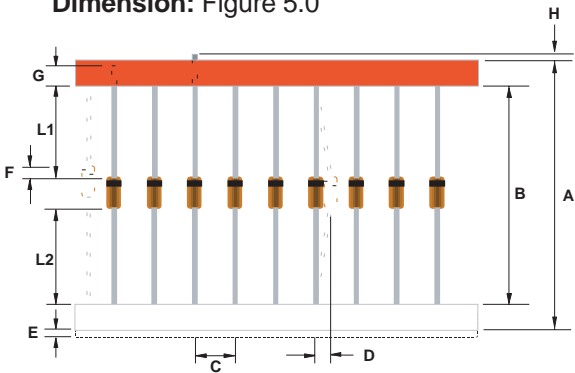
Note: All Dimensions are in inches

DO-35 Tape and Ammo Data, continued

DO-35 Ammo Packing  
Configuration: Figure 4.0



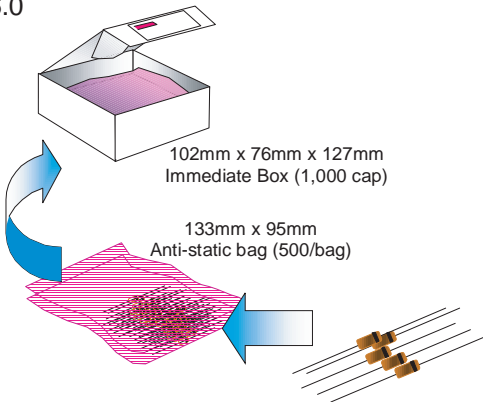
DO-35 Taping  
Dimension: Figure 5.0



TAPING DIMENSIONS

	INCH	MM	MILS	NOTES
A	2.520 +0.066/ -0.027	64.00 +1.69/ -0.69	2519 +66.5/ -27.0	Overall width
B	2.047±0.027	52 ±0.69	2047±27	Inside Tape Spacing
C	0.200 ±0.0157	5.08 ±0.40	200 ±15.7	Component Pitch
D	0.047(max)	1.2(max)	47(max)	Component Misalignment
E	0.022(max)	0.55(max)	22(max)	Tape Mismatch
F	0.027(max)	±0.69	±27	Units in line w/ one another
G	0.126(min)	3.2(min)	126(min)	Lead amount between tapes
H	0	0	0	Lead amount beyond tapes
L1-L2	±0.027	±0.69	±27	Delta between two leads

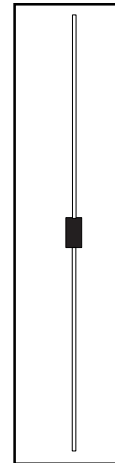
DO-35 Bulk Packing  
Configuration: Figure 6.0



## DO-35 Package Dimensions



### DO-35 (FS PKG Code D2)

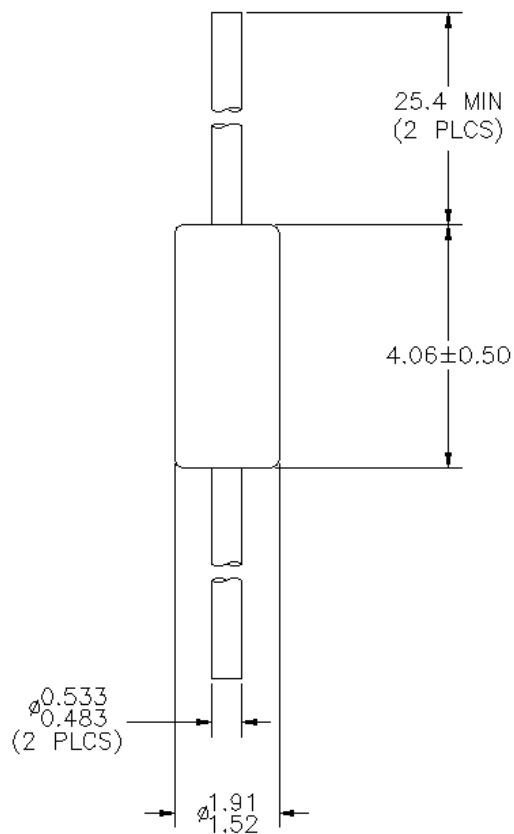


1:1

Scale 1:1 on letter size paper

Dimensions shown below are in millimeters

Part Weight per unit (gram): 0.137



NOTES: UNLESS OTHERWISE SPECIFIED

- A) THIS PACKAGE CONFORMS TO JEDEC  
DO-204, VAR. AH, ISSUE B,  
DATED JANUARY 20, 1976.
- B) HERMITICALLY SEALED GLASS PACKAGE

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