

## 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.

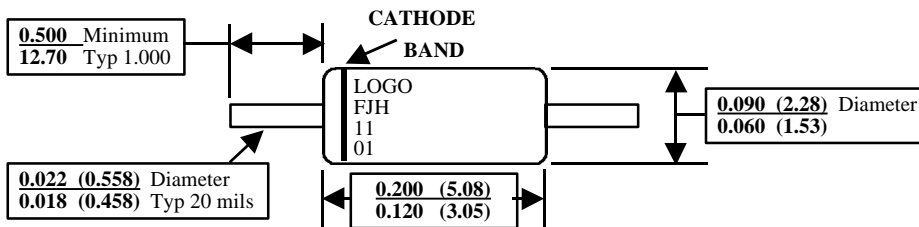
This product is light sensitive, any damage to the body coating will affect the reverse leakage when exposed to light.

## 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	15	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



Typical Forward Voltages	
1.0 uA	530 mV
10 uA	605 mV
100 uA	685 mV
1.0 mA	780 mV
10 mA	895 mV
50 mA	995 mV
100 mA	1.07 V

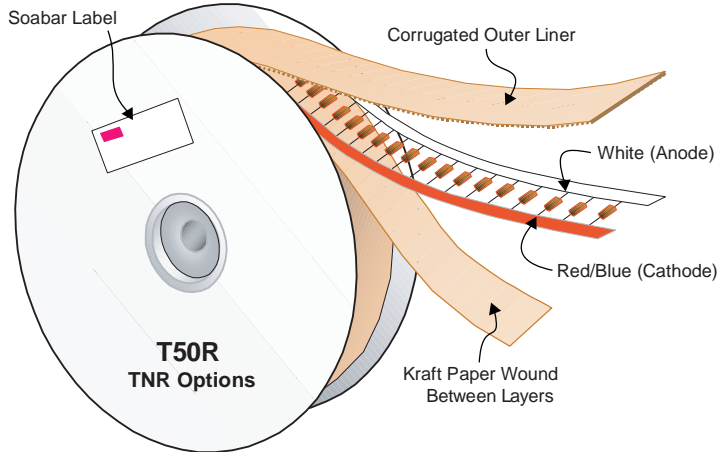
### Electrical Characteristics TA = 25°C unless otherwise noted

SYM	CHARACTERISTICS	MIN	MAX	UNITS	TEST CONDITIONS
B <sub>V</sub>	Breakdown Voltage	20		V	I <sub>R</sub> = 5.0 uA
I <sub>R</sub>	Reverse Leakage		5.0 15	pA pA	V <sub>R</sub> = 5.0 V V <sub>R</sub> = 15 V
V <sub>F</sub>	Forward Voltage		1.10	V	I <sub>F</sub> = 50 mA
C <sub>T</sub>	Diode Capacitance		2.0	pF	V <sub>R</sub> = 0 V, f = 1.0 MHz

# DO-35 Tape and Reel Data



## DO-35 Packaging Configuration: Figure 1.0



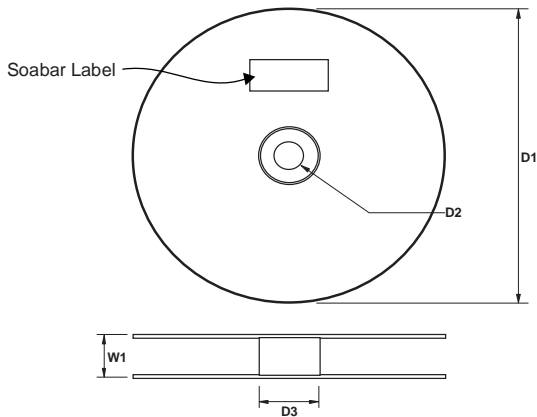
## DO-35 Packaging Information Table: Figure 2.0

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



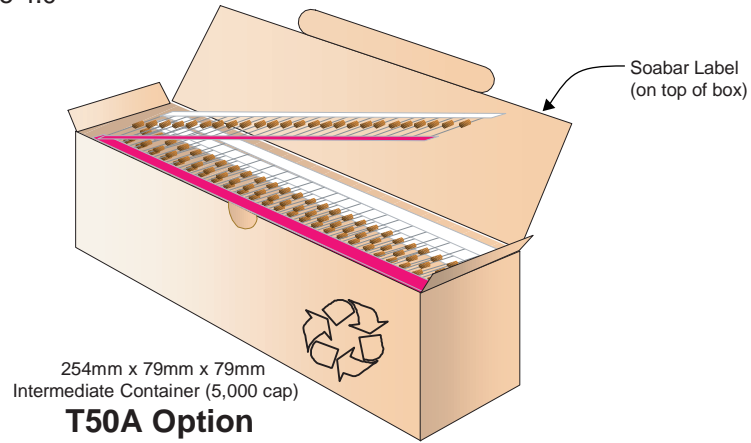
### REEL DIMENSIONS

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

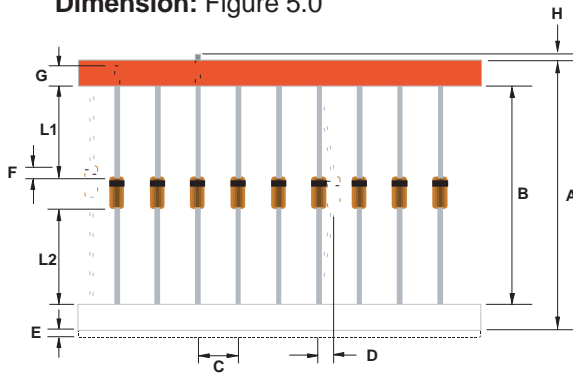
Note: All Dimensions are in inches

## DO-35 Tape and Ammo Data, continued

### DO-35 Ammo Packing Configuration: Figure 4.0



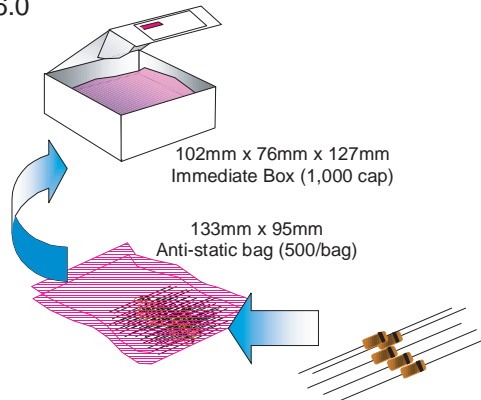
### DO-35 Taping Dimension: Figure 5.0



#### 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

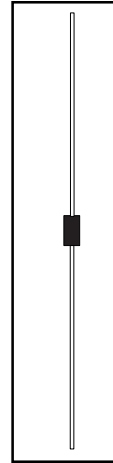
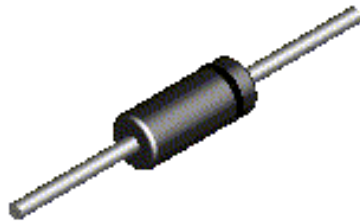
### DO-35 Bulk Packing Configuration: Figure 6.0



# DO-35 Package Dimensions



## DO-35 (FS PKG Code D2)

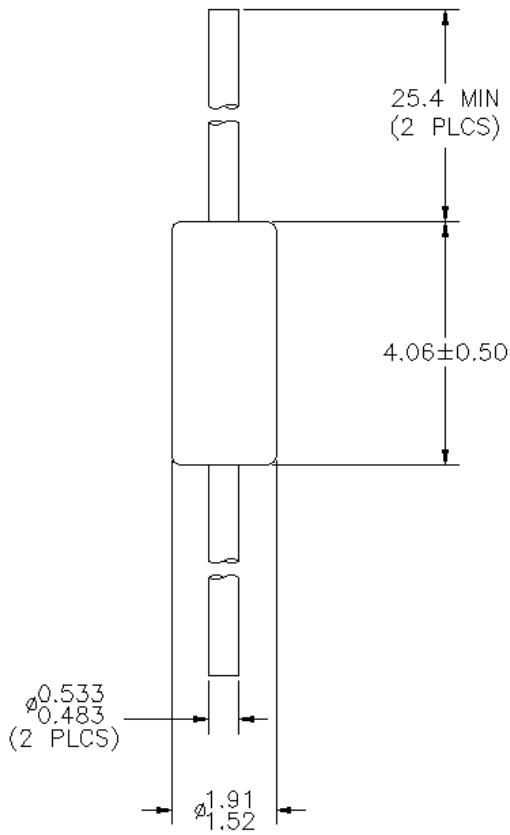


1:1

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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