

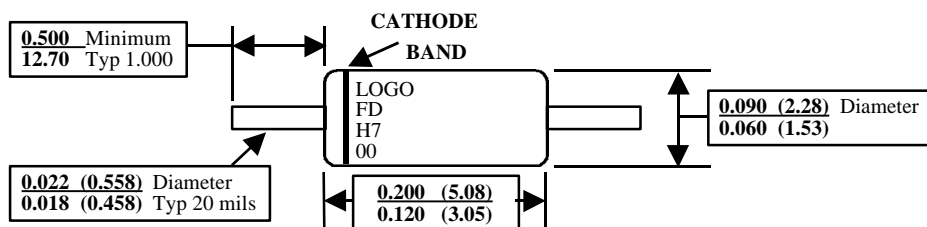
**Information Only Data Sheet**

FINAL REVERSE CURRENT & FORWARD VOLTAGE LIMITS MIGHT BE INCREASED SLIGHTLY

**Absolute Maximum Ratings** (note 1) TA = 25°C unless otherwise noted

Parameter	Value	Units
Storage Temperature	-65 to +200	°C
Maximum Junction Temperature	-65 to +175	°C
Total Power Dissipation at 25°C	250	mW
Derate above 25°C	1.67	mW/°C
Working Inverse Voltage	20	V
DC Forward Current	150	mA

Note 1: These ratings are limiting values above which the serviceability of any semiconductor device may be impaired

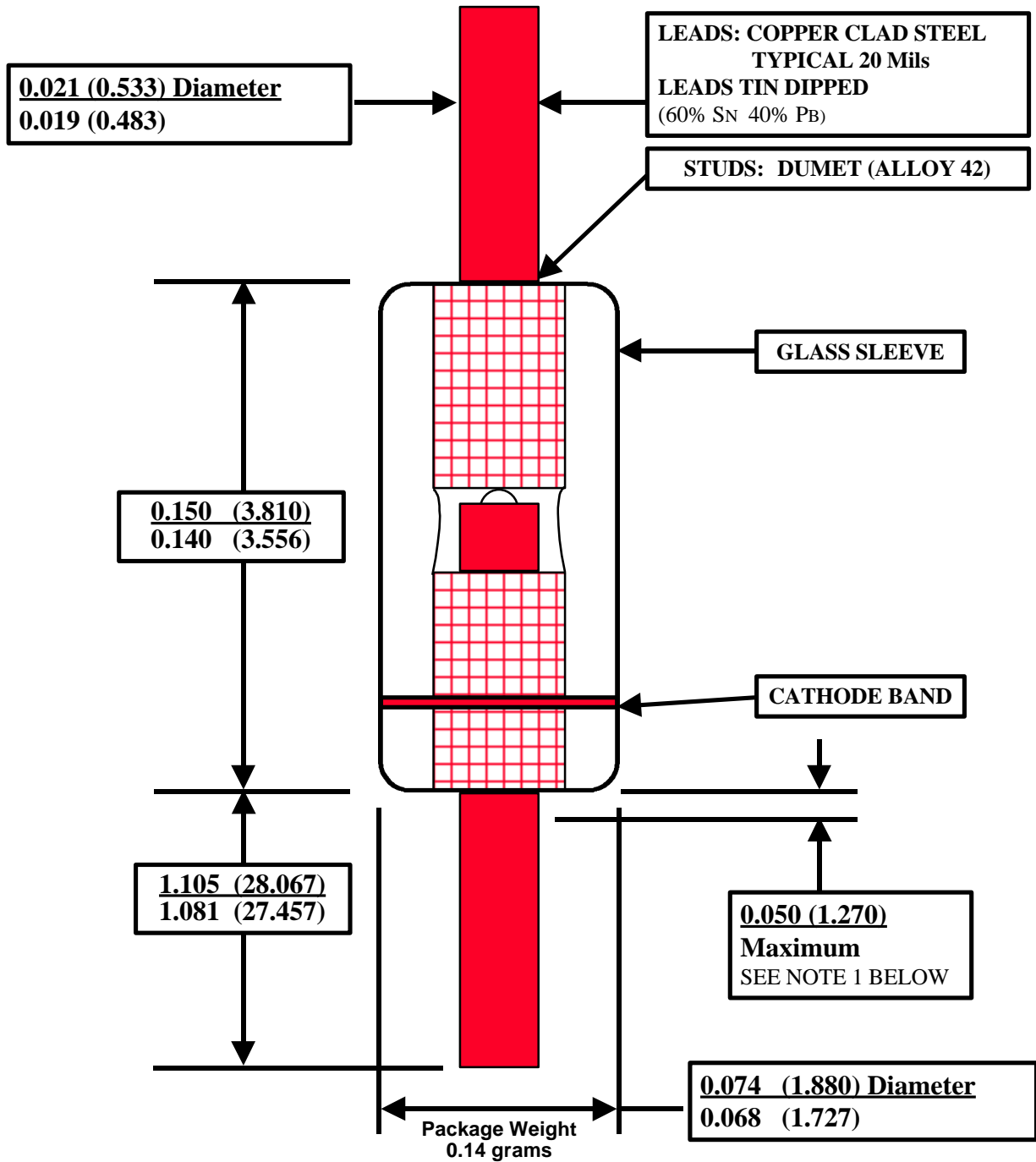


**Electrical Characteristics** TA = 25°C unless otherwise noted

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		50 50	nA uA	V <sub>R</sub> = 20 V V <sub>R</sub> = 20 V T <sub>A</sub> = 150°C
V <sub>F</sub>	Forward Voltage	420 520 640 760 810 0.89	500 610 740 900 990 1.25	mV mV mV mV mV V	I <sub>F</sub> = 10 uA I <sub>F</sub> = 100 uA I <sub>F</sub> = 1.0 mA I <sub>F</sub> = 10 mA I <sub>F</sub> = 20 mA I <sub>F</sub> = 50 mA
T <sub>RR</sub>	Reverse Recovery Time		900	ps	I <sub>F</sub> = I <sub>R</sub> = 10 mA I <sub>RR</sub> = 1.0 mA R <sub>Loop</sub> = 100 Ohm
C <sub>T</sub>	Diode Capacitance		1.5	pF	V <sub>R</sub> = 0 V, f = 1.0 MHz

**STANDARD DIGITAL MARKING CRITERIA**

MAXIMUM CHARACTERS PER LINE: 3    MAXIMUM NUMBER OF LINES: 4  
LOGO AND CHARACTERS M & W COUNT AS 2 CHARACTERS EACH



**NOTE 1:**  
LEAD DIAMETER NOT CONTROLLED IN THIS ZONE TO ALLOW FOR FLASH, LEAD FINISH BUILD-UP, & MINOR IRREGULARITIES OTHER THAN SLUGS.

**DO-35 PACKAGE**  
Fairchild Semiconductor's Criteria  
11-MAR-97

# FD700

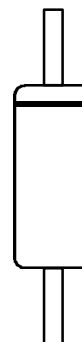
Ultra Fast Diode Diode

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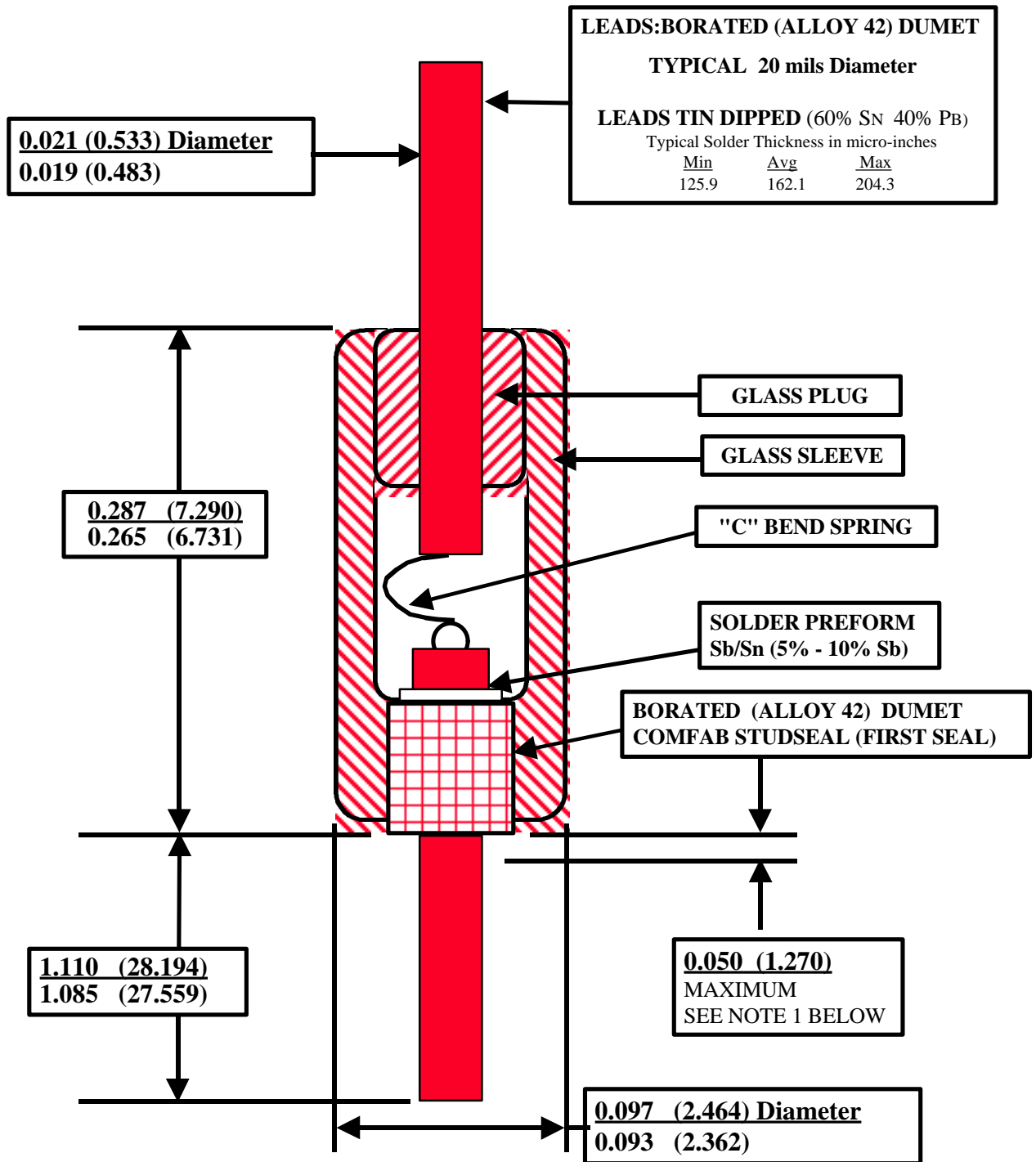
Note 1: These ratings are limiting values above which the serviceability of any semiconductor device may be impaired

DO-7  
PACKAGE



## 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		50 50	nA uA	V <sub>R</sub> = 20 V V <sub>R</sub> = 20 V T <sub>A</sub> = 150°C
V <sub>F</sub>	Forward Voltage	420 520 640 760 810 0.89	500 610 740 880 950 1.10	mV mV mV mV mV V	I <sub>F</sub> = 10 uA I <sub>F</sub> = 100 uA I <sub>F</sub> = 1.0 mA I <sub>F</sub> = 10 mA I <sub>F</sub> = 20 mA I <sub>F</sub> = 50 mA
T <sub>RR</sub>	Reverse Recovery Time		700	ps	I <sub>F</sub> = I <sub>R</sub> = 10 mA I <sub>RR</sub> = 1.0 mA R <sub>Loop</sub> = 100 Ohm
C <sub>T</sub>	Diode Capacitance		1.0	pF	V <sub>R</sub> = 0 V, f = 1.0 MHz



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LEAD DIAMETER NOT CONTROLLED IN THIS ZONE TO ALLOW FOR FLASH, LEAD FINISH BUILD-UP, & MINOR IRREGULARITIES OTHER THAN SLUGS.

**DO-7 PACKAGE**  
Fairchild Semiconductor's Criteria  
13-APR-93

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