



FDH700

ULTRA FAST DIODE

DISCRETE POWER AND SIGNAL
TECHNOLOGIES

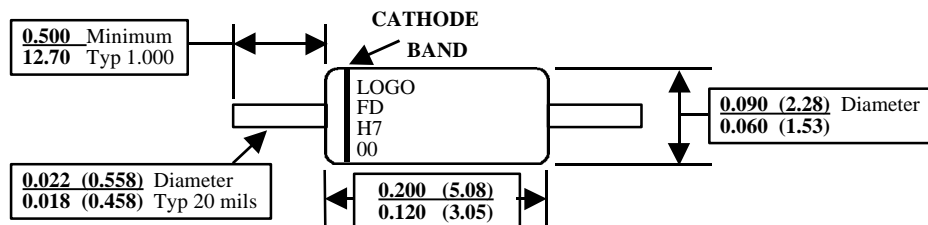
Information Only Data Sheet

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

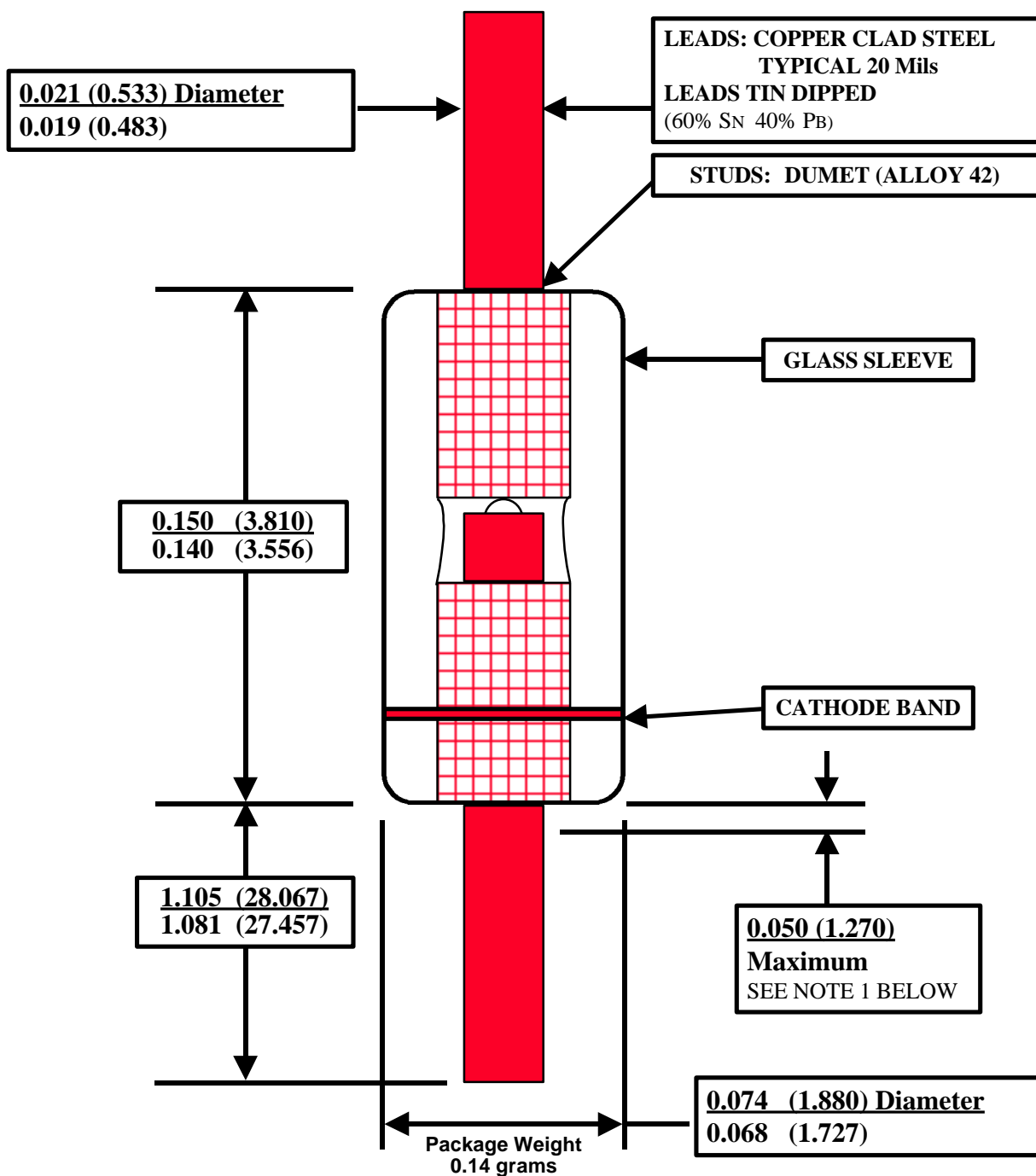


Electrical Characteristics TA = 25°C unless otherwise noted

SYM	CHARACTERISTICS	MIN	MAX	UNITS	TEST CONDITIONS
B _V	Breakdown Voltage	30		V	I _R = 5.0 uA
I _R	Reverse Leakage		50 50	nA uA	V _R = 20 V V _R = 20 V T _A = 150°C
V _F	Forward Voltage	420 520 640 760 810 0.89	500 610 740 900 990 1.25	mV mV mV mV mV V	I _F = 10 uA I _F = 100 uA I _F = 1.0 mA I _F = 10 mA I _F = 20 mA I _F = 50 mA
T _{RR}	Reverse Recovery Time		900	ps	I _F = I _R = 10 mA I _{RR} = 1.0 mA R _{Loop} = 100 Ohm
C _T	Diode Capacitance		1.5	pF	V _R = 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

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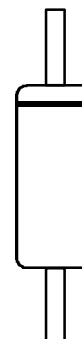
Ultra Fast Diode Diode

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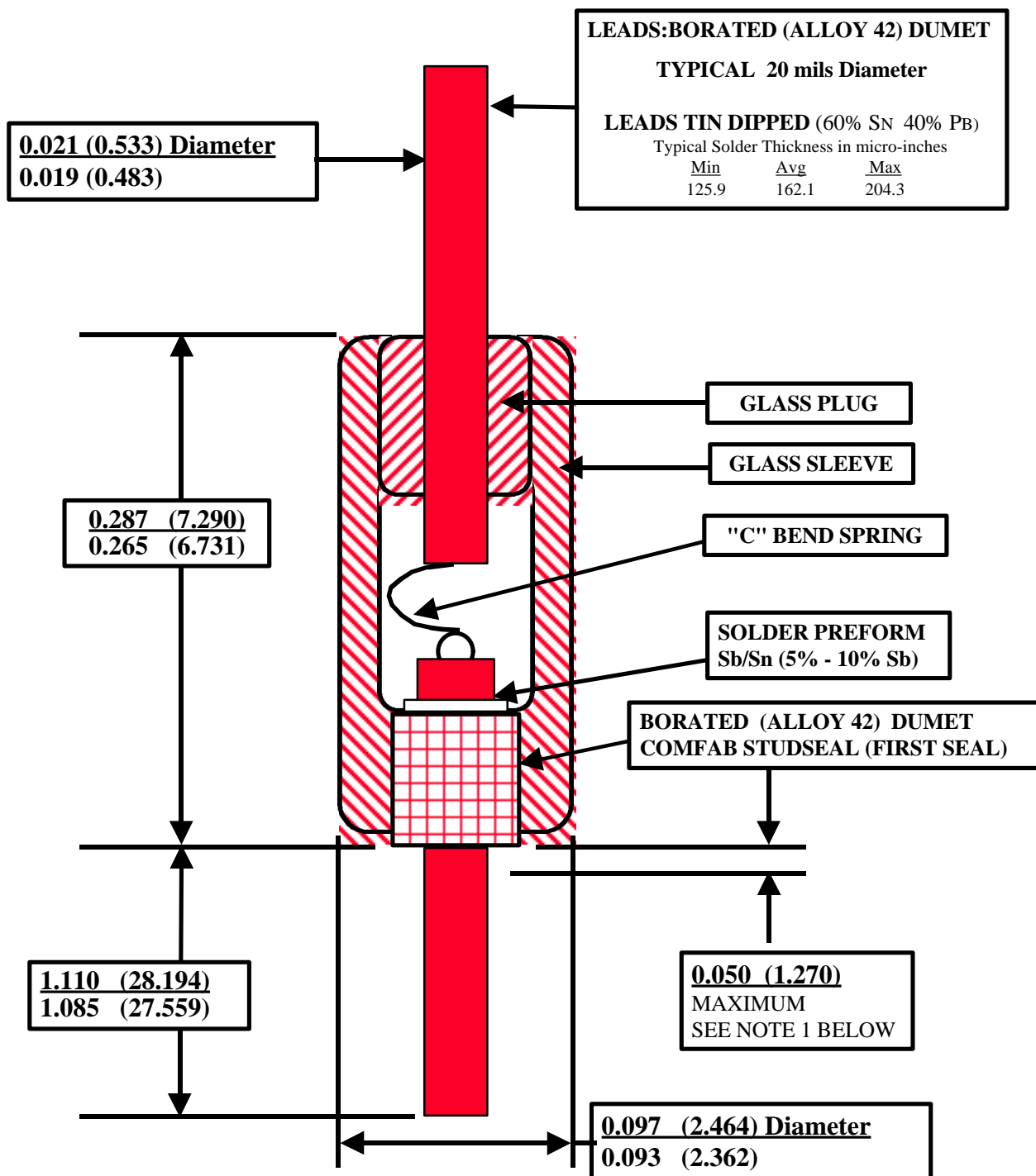
Note 1: These ratings are limiting values above which the serviceability of any semiconductor device may be impaired

DO-7
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Electrical Characteristics TA = 25°C unless otherwise noted

SYM	CHARACTERISTICS	MIN	MAX	UNITS	TEST CONDITIONS
B _V	Breakdown Voltage	30		V	I _R = 5.0 uA
I _R	Reverse Leakage		50 50	nA uA	V _R = 20 V V _R = 20 V T _A = 150°C
V _F	Forward Voltage	420 520 640 760 810 0.89	500 610 740 880 950 1.10	mV mV mV mV mV V	I _F = 10 uA I _F = 100 uA I _F = 1.0 mA I _F = 10 mA I _F = 20 mA I _F = 50 mA
T _{RR}	Reverse Recovery Time		700	ps	I _F = I _R = 10 mA I _{RR} = 1.0 mA R _{Loop} = 100 Ohm
C _T	Diode Capacitance		1.0	pF	V _R = 0 V, f = 1.0 MHz



NOTE 1:

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Preliminary	First Production	This datasheet contains preliminary data, and supplementary data will be published at a later date. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
No Identification Needed	Full Production	This datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
Obsolete	Not In Production	This datasheet contains specifications on a product that has been discontinued by Fairchild semiconductor. The datasheet is printed for reference information only.