FAIRCHILD SEMICONDUCTOR™

FDH700

ULTRA FAST DIODE

DISCRETE POWER AND SIGNAL TECHNOLOGIES

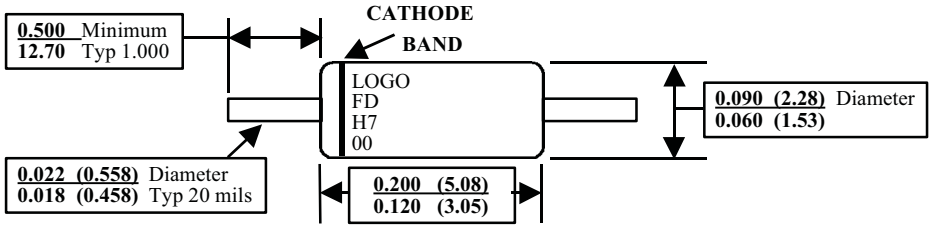
Information Only Data Sheet

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

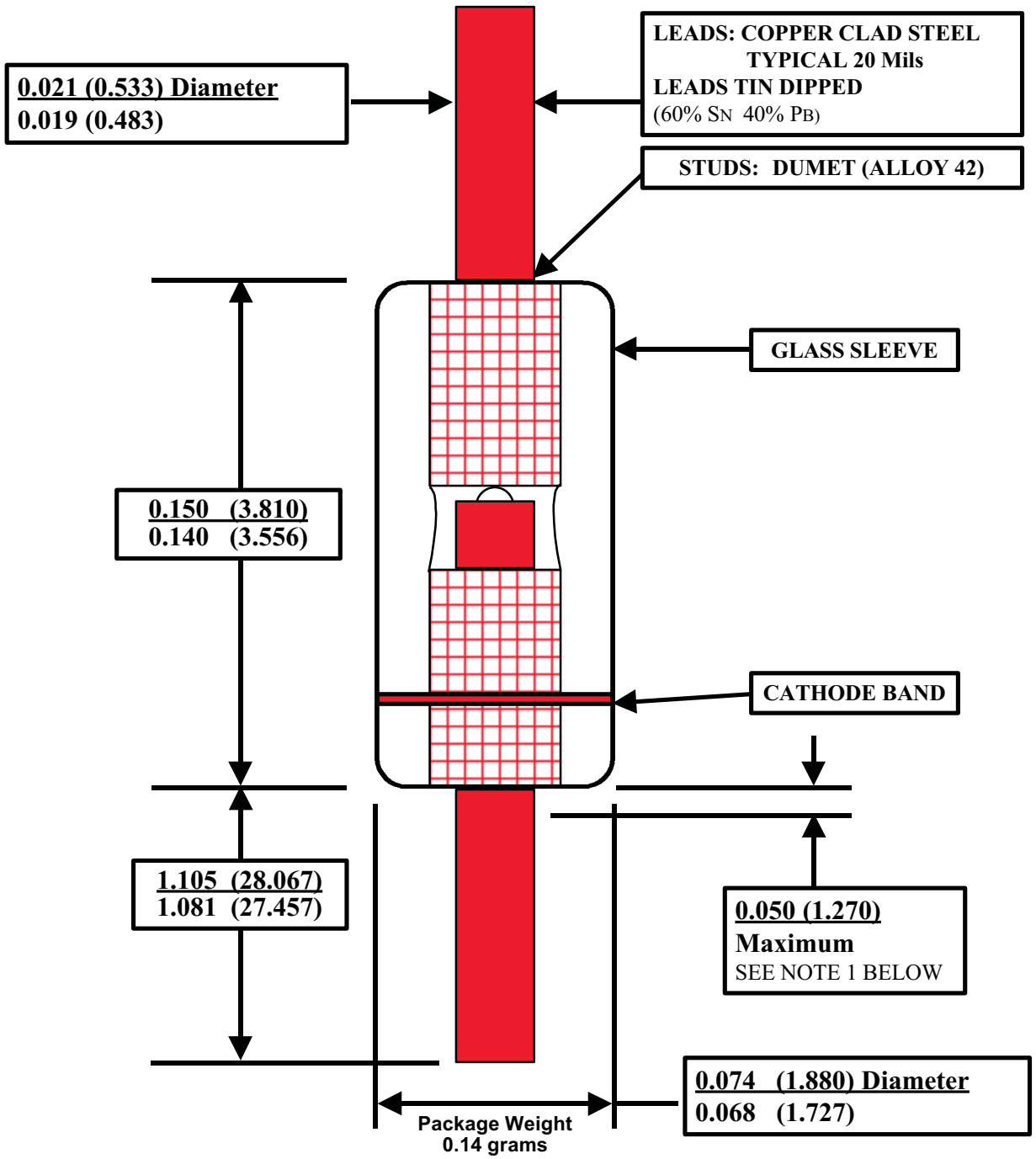
© 1999 Fairchild Semiconductor Corporation

FAIRCHILD SEMICONDUCTOR™

DISCRETE POWER AND SIGNAL TECHNOLOGIES

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

FAIRCHILD SEMICONDUCTOR™

DISCRETE POWER AND SIGNAL TECHNOLOGIES

FD700

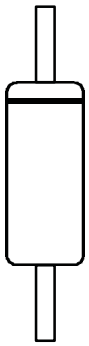
Ultra Fast Diode Diode

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

DO-7 PACKAGE



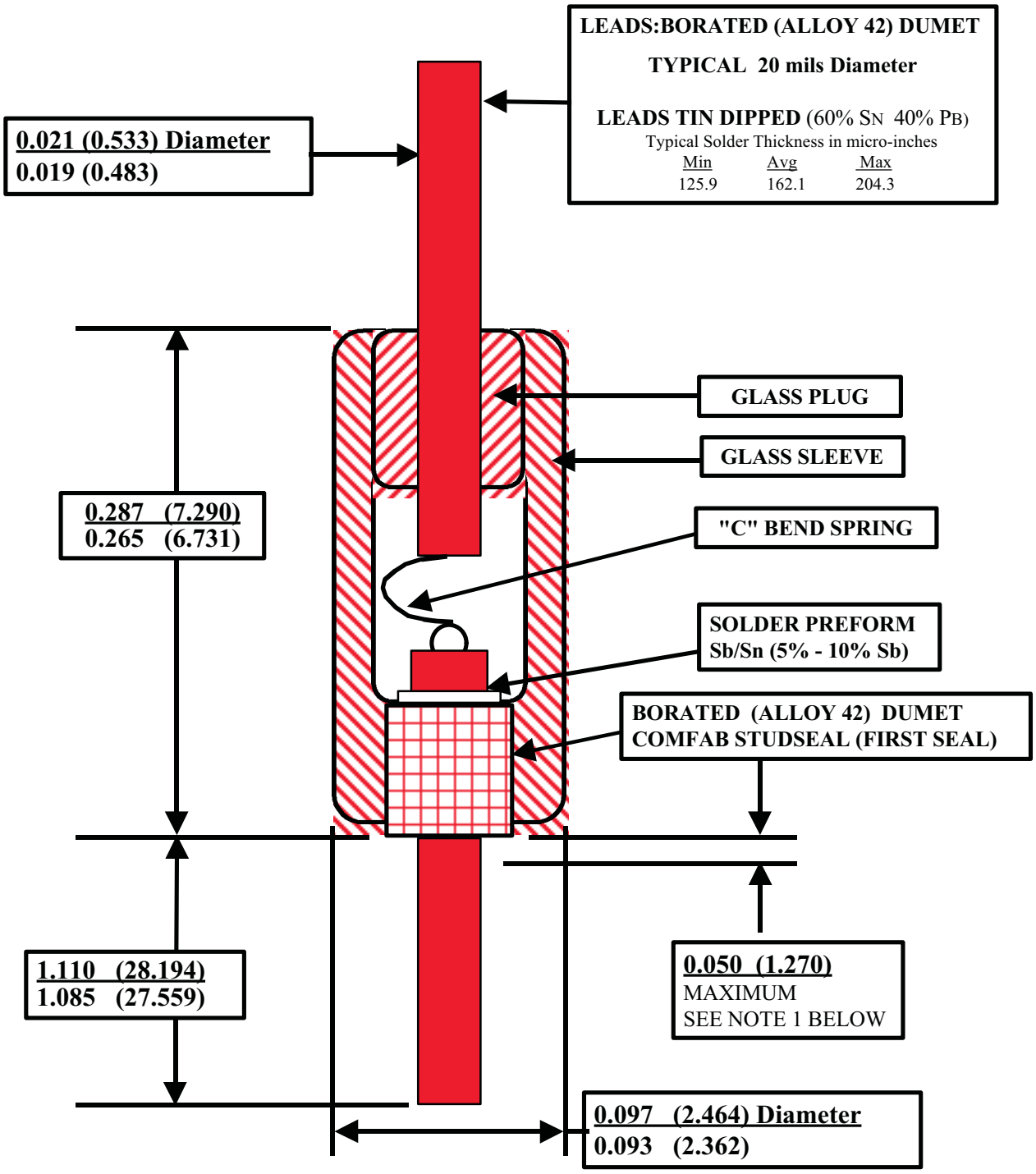
Electrical Characteristics TA = 25°C unless otherwise noted

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

© 1997 Fairchild Semiconductor Corporation

FAIRCHILD SEMICONDUCTOR™

DISCRETE POWER AND SIGNAL TECHNOLOGIES



NOTE 1:

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

TRADEMARKS

The following are registered and unregistered trademarks Fairchild Semiconductor owns or is authorized to use and is not intended to be an exhaustive list of all such trademarks.

ACEx™	FAST ®	OPTOPLANAR™	STAR*POWER™
Bottomless™	FASTr™	PACMAN™	Stealth™
CoolFET™	FRFET™	POP™	SuperSOT™-3
CROSSVOLT™	GlobalOptoisolator™	Power247™	SuperSOT™-6
DenseTrench™	GTO™	PowerTrench®	SuperSOT™-8
DOME™	HiSeC™	QFET™	SyncFET™
EcoSPARK™	ISOPLANAR™	QS™	TinyLogic™
E^2CMOS™	LittleFET™	QT Optoelectronics™	TruTranslation™
EnSigna™	MicroFET™	Quiet Series™	UHC™
FACT™	MICROWIRE™	SILENT SWITCHER®	UltraFET®
FACT Quiet Series™	OPTOLOGIC™	SMART START™	VCX™

STAR*POWER is used under license

DISCLAIMER

FAIRCHILD SEMICONDUCTOR RESERVES THE RIGHT TO MAKE CHANGES WITHOUT FURTHER NOTICE TO ANY PRODUCTS HEREIN TO IMPROVE RELIABILITY, FUNCTION OR DESIGN. FAIRCHILD DOES NOT ASSUME ANY LIABILITY ARISING OUT OF THE APPLICATION OR USE OF ANY PRODUCT OR CIRCUIT DESCRIBED HEREIN; NEITHER DOES IT CONVEY ANY LICENSE UNDER ITS PATENT RIGHTS, NOR THE RIGHTS OF OTHERS.

LIFE SUPPORT POLICY

FAIRCHILD'S PRODUCTS ARE NOT AUTHORIZED FOR USE AS CRITICAL COMPONENTS IN LIFE SUPPORT DEVICES OR SYSTEMS WITHOUT THE EXPRESS WRITTEN APPROVAL OF FAIRCHILD SEMICONDUCTOR CORPORATION.
As used herein:

1. Life support devices or systems are devices or systems which, (a) are intended for surgical implant into the body, or (b) support or sustain life, or (c) whose failure to perform when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in significant injury to the user.

2. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

PRODUCT STATUS DEFINITIONS

Definition of Terms

Datasheet Identification	Product Status	Definition
Advance Information	Formative or In Design	This datasheet contains the design specifications for product development. Specifications may change in any manner without notice.
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.

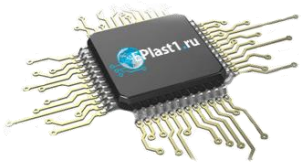
Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)
Факс: 8 (812) 320-02-42
Электронная почта: org@eplast1.ru
Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.