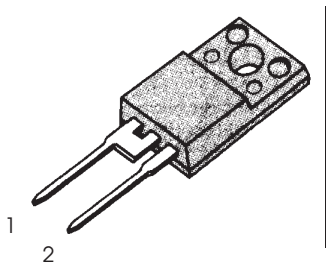
FEATURES

* High Voltage and High Reliability
* High Speed Switching (Trr=120nS)
* Low V_F in Turn on (V_F=1.4V at I_F=10A)
* Suitable for Damper Diode in Horizontal Deflection Circuits

TO-220F



MECHANICAL CHARACTERISTICS

* Case: Epoxi, Molded
* Easy to Mount on Circuit Board
* Shipped 50units per Plastic Tube
* Marking: D10U150S

MAXIMUM RATINGS

Rating	Symbol	Value	Units
Peak Repetitive Reverse Voltage	V_{RRM}	1500	V
Average Rectified Forward Current, T_C=125	$I_{F(AV)}$	10	A
Nonrepetetive Peak Surge Current (Halfwave, Single Phase, 60Hz)	I_{FSM}	100	A
Operating Junction and Storage Temperature	T_J, T_{STG}	-65 ~ 125	
Controlled Avalanche Energe	W_{AVAL}	20	mJ

THERMAL CHARACTERISTICS

Thermal Resistance- Junction to Case	$R_{\theta JC}$	4.0	/W

FAIRCHILD SEMICONDUCTOR TM

ELECTRICAL CHARACTERISTICS

Characteristics	Symbol	Typ	Max	Units
Maximum Instantaneous Forward Voltage (1)	V_F			
(I_F = 10A, T_J = 125)		1.3	1.7	V
(I_F = 10A, T_J = 25)		1.4	1.8	
Maximum Instantaneous Reverse Current (1)	I_R			
(Rated DC Voltage, T_J = 125)		20	200	uA
(Rated DC Voltage, T_J = 25)		1.5	15	
Maximum Reverse Recovery Time	trr			
(I_F = 1.0A, di/dt = 50A/us)		120	150	ns
Maximum Forward Recovery Time	tfr			
(I_F = 6.5A, di/dt = 50A/us)		200	300	ns
Maximum Forward Recovery Voltage	V_{FRM}	10	14	V

(1) Pulse Test: Pulse Width = 300us, Duty Cycle 2.0%

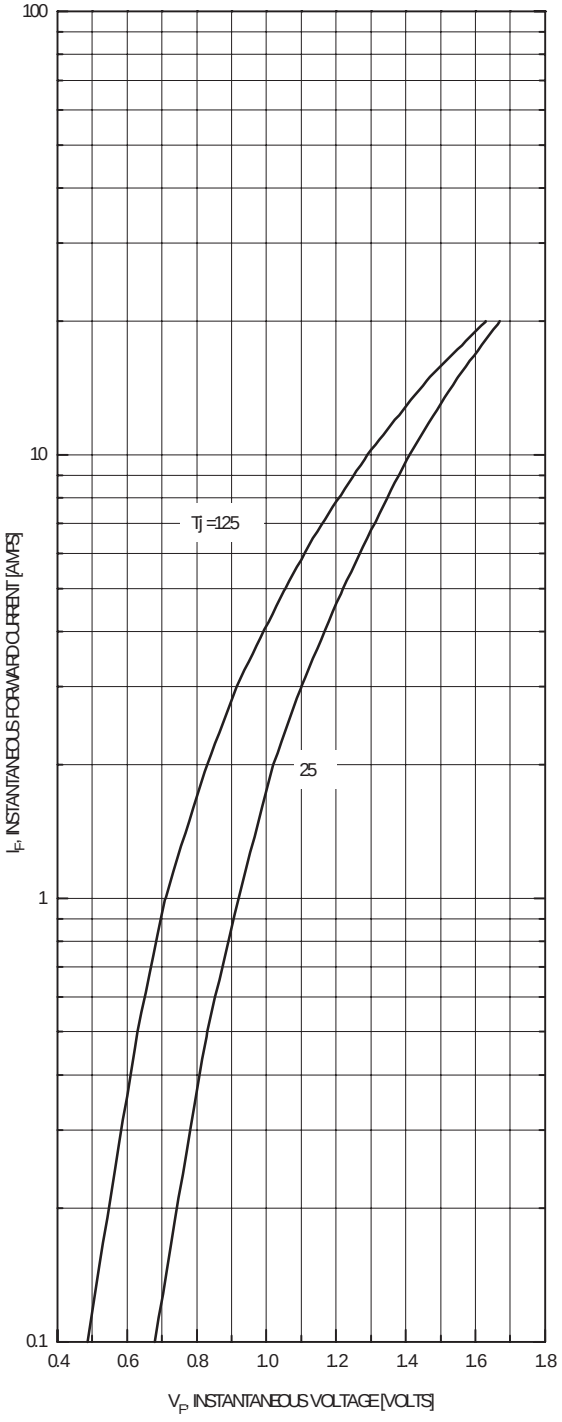


Figure 1. Typical Forward Voltage

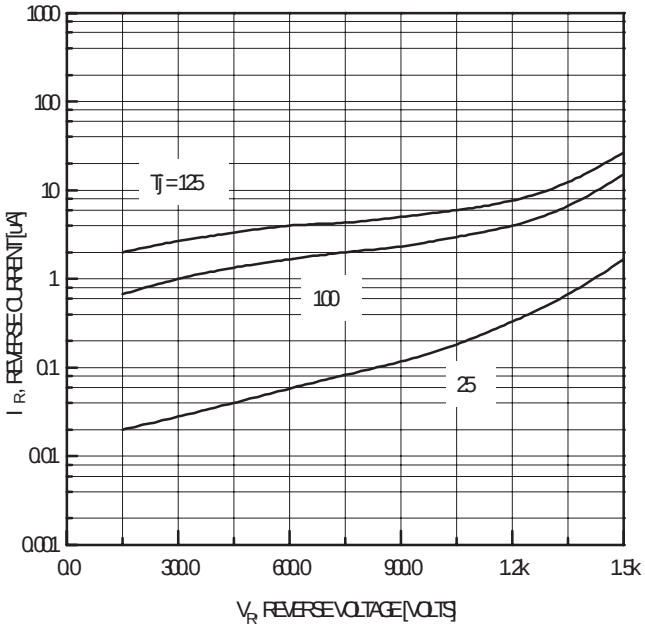


Figure 2. Typical Reverse Current

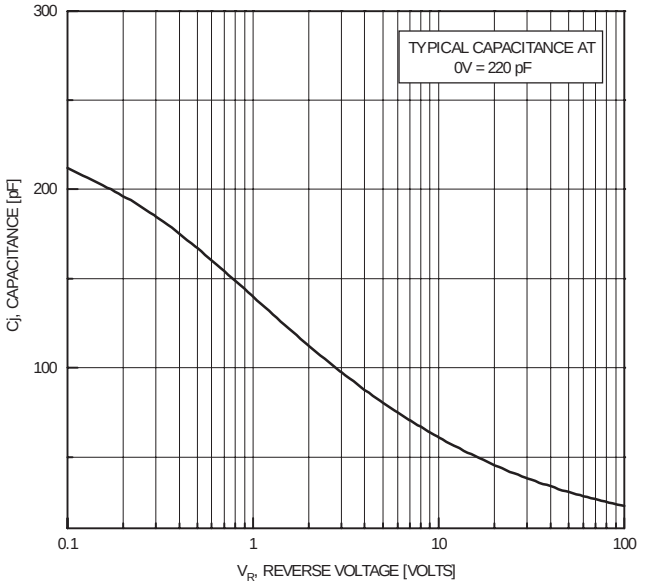


Figure 3. Typical Capacitance

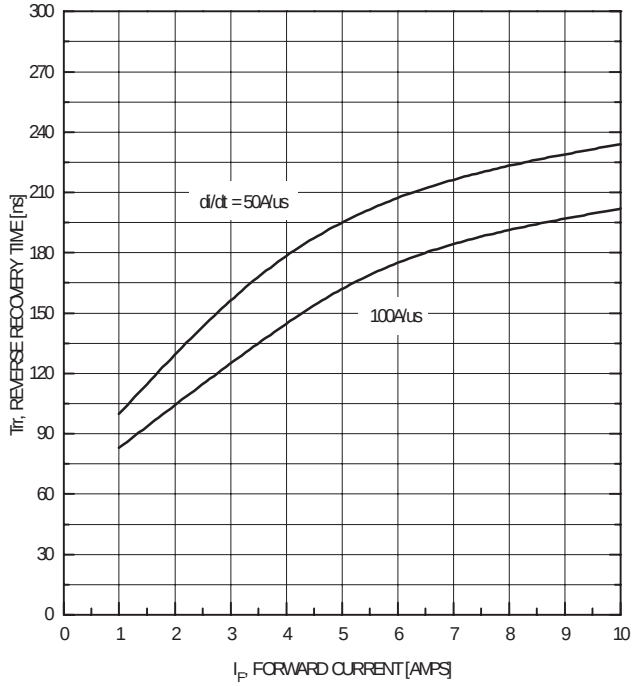


Figure 4. Typical Reverse Recovery Time

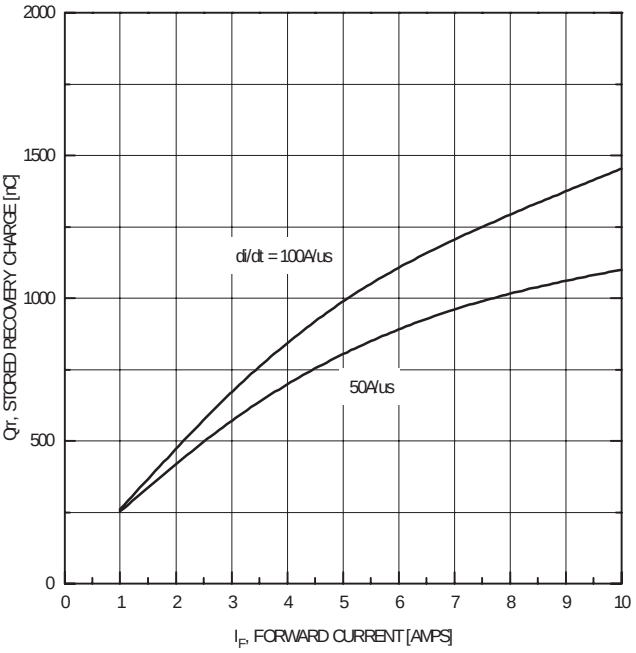
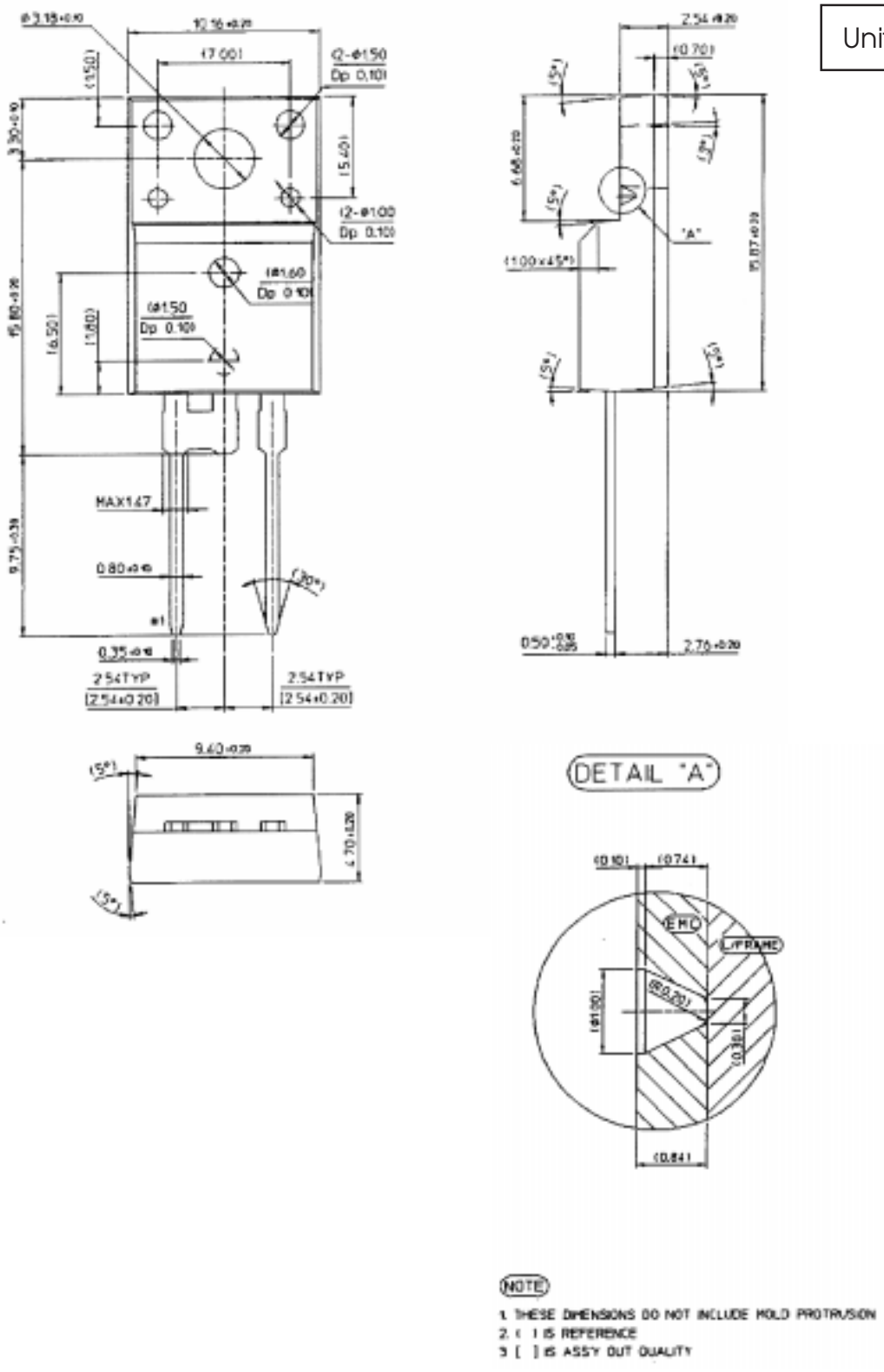


Figure 5. Typical Stored Recovery Charge

PACKAGE DIMENSION

Unit : mm



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