POWER RECTIFIER SDS10U150S

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

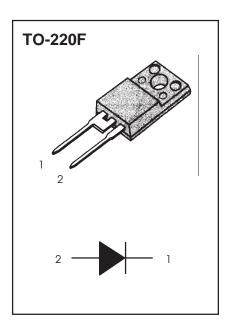


* Case: Epoxi, Molded

* 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	А
Nonrepetetive Peak Surge Current	I _{FSM}	100	А
(Halfwave, Single Phase, 60Hz)			
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	$R_{ heta JC}$	4.0	/W
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ELECTRICAL CHARACTERISTICS

Characteristics	Symbol	Тур	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%

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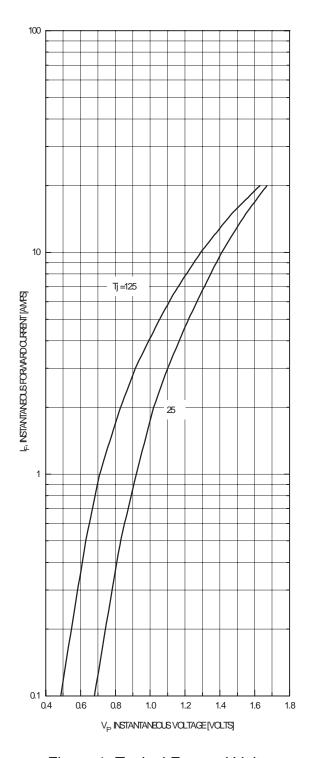


Figure 1. Typical Forward Voltage

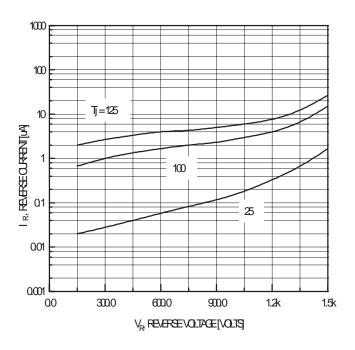


Figure 2. Typical Reverse Current

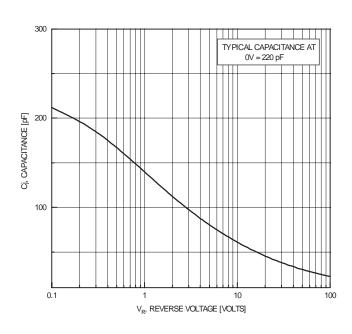


Figure 3. Typical Capacitance



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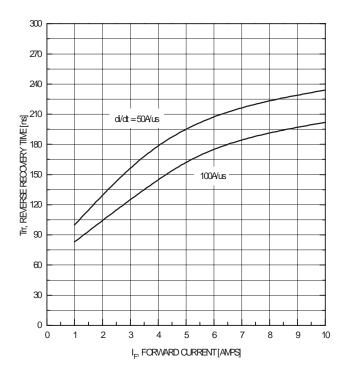


Figure 4. Typical Reverse Recovery Time

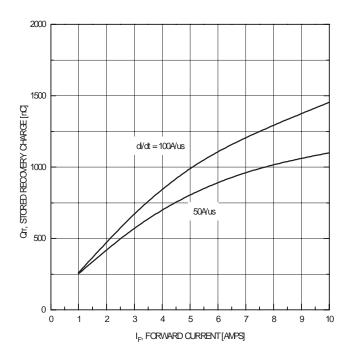
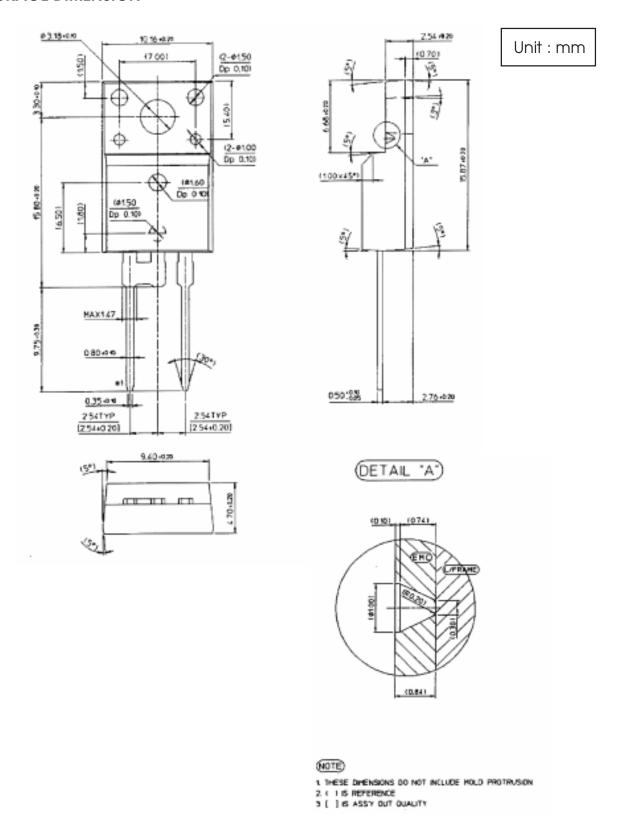


Figure 5. Typical Stored Recovery Charge



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PACKAGE DIMENSION





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