POWER RECTIFIER SDS06U150S

# **FEATURES**

- \* High Voltage and High Reliability
- \* High Speed Switching (Trr=120nS)
- \* Low  $V_F$  in Turn on  $(V_F=1.4V$  at  $I_F=6A)$
- \* Suitable for Damper Diode in Horizontal Deflection Circuits

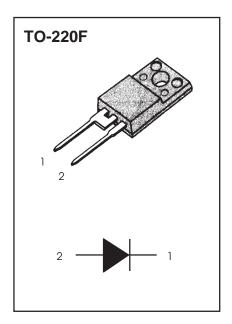


\* Case: Epoxi, Molded

\* Easy to Mount on Circuit Board

\* Shipped 50units per Plastic Tube

\* Marking: D06U150S



# **MAXIMUM RATINGS**

Rating	Symbol	Value	Units
Peak Repetitive Reverse Voltage	$V_{RRM}$	V <sub>RRM</sub> 1500	
Average Rectified Forward Current, T <sub>C</sub> =125	I <sub>F(AV)</sub>	6	А
Nonrepetetive Peak Surge Current	I <sub>FSM</sub>	60	А
(Halfwave, Single Phase, 60Hz)			
Operating Junction and Storage Temperature	T <sub>J</sub> , T <sub>STG</sub>	-65 ~ 125	
Controlled Avalanche Energe	W <sub>AVAL</sub>	20	mJ

# THERMAL CHARACTERISTICS

Thermal Resistance- Junction to Case	$R_{\theta JC}$	5.0	/W
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# **ELECTRICAL CHARACTERISTICS**

Characteristics	Symbol	Тур	Max	Units
Maximum Instantaneous Forward Voltage (1)	V <sub>F</sub>			
$(I_F = 6A, T_J = 125)$		1.3	1.7	V
$(I_F = 4A, T_J = 25)$		1.4	1.8	
Maximum Instantaneous Reverse Current (1)	I <sub>R</sub>			
(Rated DC Voltage, T <sub>J</sub> = 125 )		8	80	uA
(Rated DC Voltage, T <sub>J</sub> = 25 )		1	10	
Maximum Reverse Recovery Time	trr			
$(I_F = 1.0A, di/dt = 50A/us)$		120	150	ns
Maximum Forward Recovery Time	tfr			
(I <sub>F</sub> = 6.5A, di/dt = 50A/us)		250	350	ns
Maximum Forward Recovery Voltage	$V_{FRM}$	12	16	V

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



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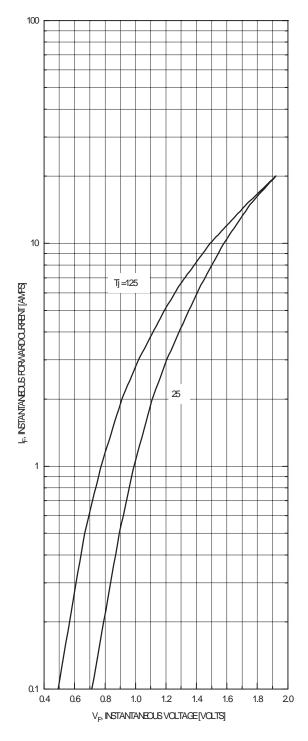


Figure 1. Typical Forward Voltage

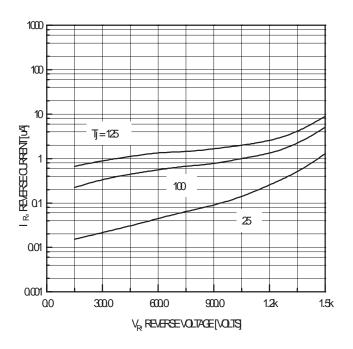


Figure 2. Typical Reverse Current

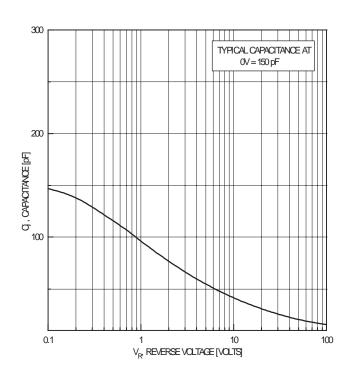


Figure 3. Typical Capacitance

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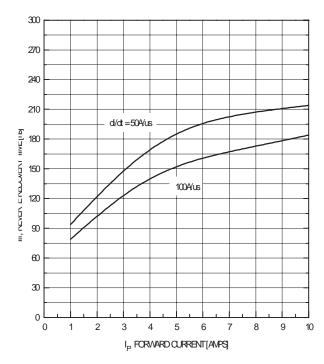


Figure 4. Typical Reverse Recovery Time

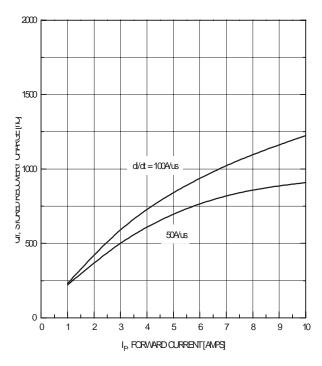
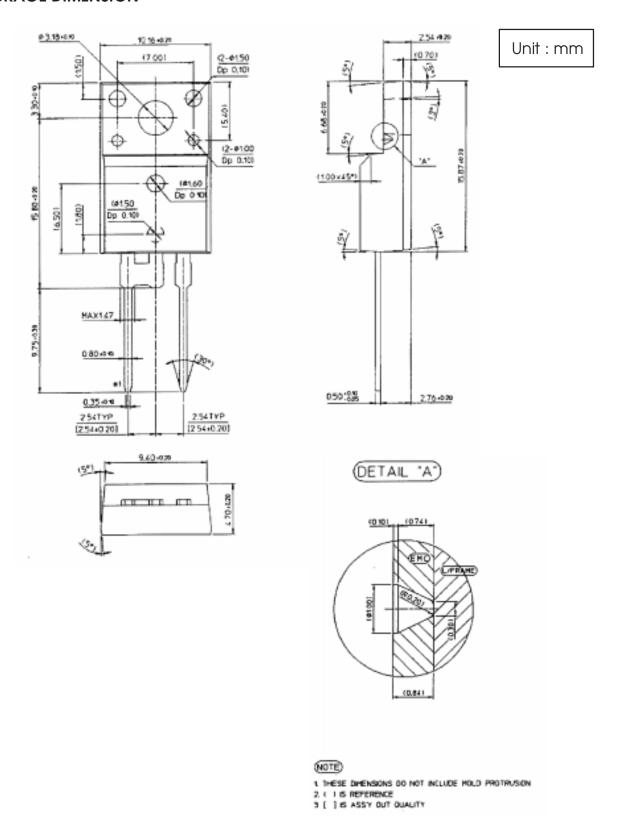


Figure 5. Typical Stored Recovery Charge



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# **PACKAGE DIMENSION**





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CROSSVOLT<sup>TM</sup> POP<sup>TM</sup>

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FACT<sup>TM</sup> QS<sup>TM</sup>

FACT Quiet Series  $^{\text{TM}}$  Quiet Series  $^{\text{TM}}$  SuperSOT  $^{\text{TM}}$ -3 SuperSOT  $^{\text{TM}}$ -6 GTO  $^{\text{TM}}$  SuperSOT  $^{\text{TM}}$ -8 TinyLogic  $^{\text{TM}}$ 

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