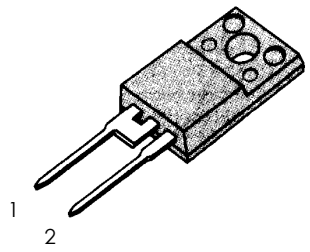
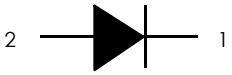
SDS06F150S POWER RECTIFIER

FEATURES

* High Voltage and High Reliability
* High Speed Switching (Trr=135ns)
* Low V_F in Turn on (V_F=1.3V at I_F=6A)
* 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: D06F150S

MAXIMUM RATINGS

Rating	Symbol	Value	Units
Peak Repetitive Reverse Voltage	V_{RRM}	1500	V
Average Rectified Forward Current, T_C=125 °C	$I_{F(AV)}$	6	A
Nonrepetetive Peak Surge Current (Halfwave, Single Phase, 60Hz)	I_{FSM}	60	A
Operating Junction and Storage Temperature	T_J, T_{STG}	-65 ~ 125	°C
Controlled Avalanche Energy	W_{AVAL}	20	mJ

THERMAL CHARACTERISTICS

Thermal Resistance- Junction to Case	$R_{\theta JC}$	6.0	°C/W

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ELECTRICAL CHARACTERISTICS

Characteristics	Symbol	Typ	Max	Units
Maximum Instantaneous Forward Voltage (1)	V_F			
(I_F = 6A, T_J = 125 °C)		1.1		V
(I_F = 6A, T_J = 25 °C)		1.3	1.6	
Maximum Instantaneous Reverse Current (1)	I_R			
(Rated DC Voltage, T_J = 125 °C)		6	60	μA
(Rated DC Voltage, T_J = 25 °C)		0.7	7	
Maximum Reverse Recovery Time	trr			
(I_F = 1.0A, di/dt = 50A/μs)		135	170	ns
Maximum Forward Recovery Time	tfr			
(I_F = 6.5A, di/dt = 50A/μs)		250	350	ns
Maximum Forward Recovery Voltage	V_{FRM}	13	17	V

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

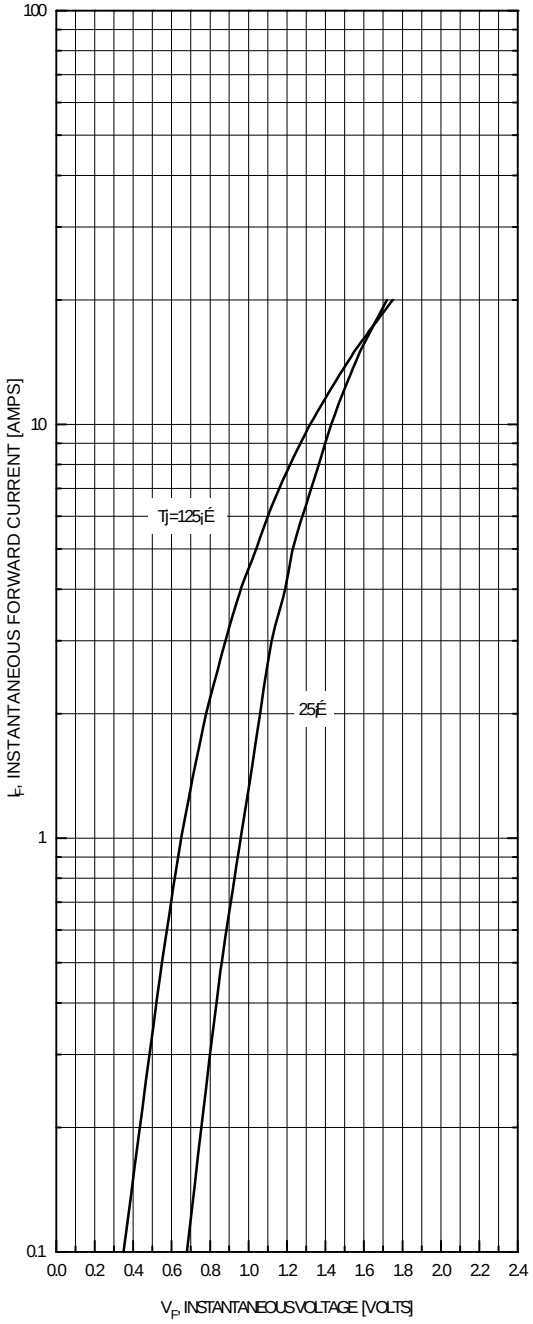


Figure 1. Typical Forward Voltage

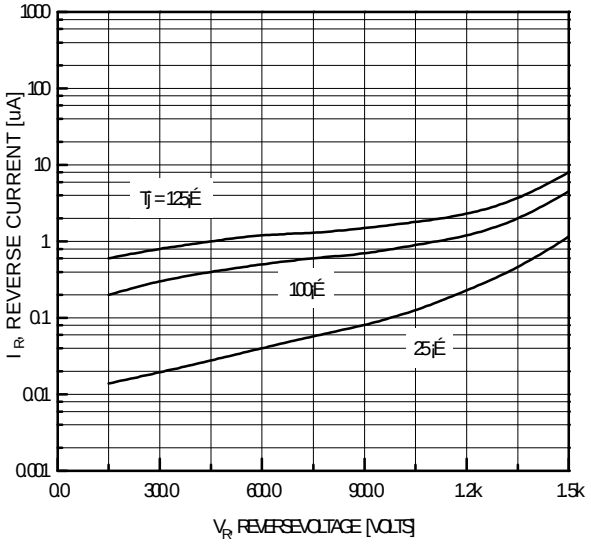


Figure 2. Typical Reverse Current

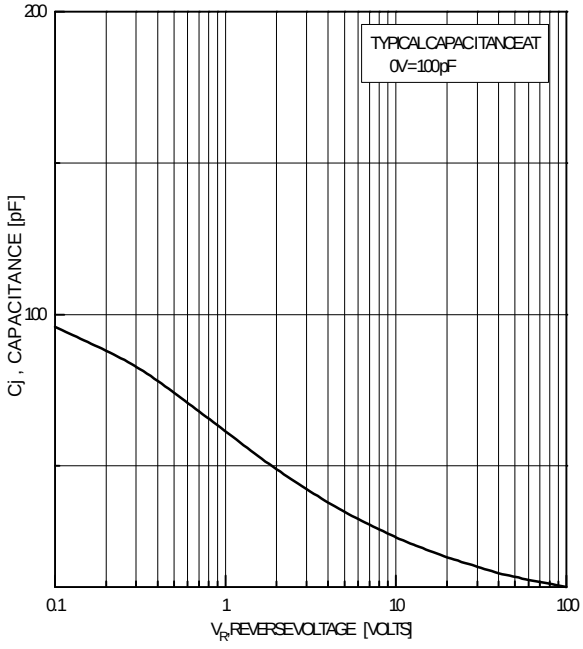


Figure 3. Typical Capacitance

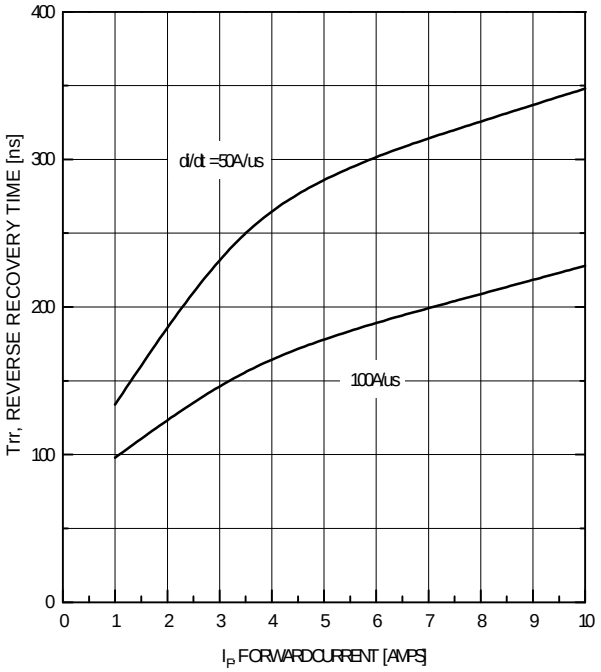


Figure 4. Typical Reverse Recovery Time

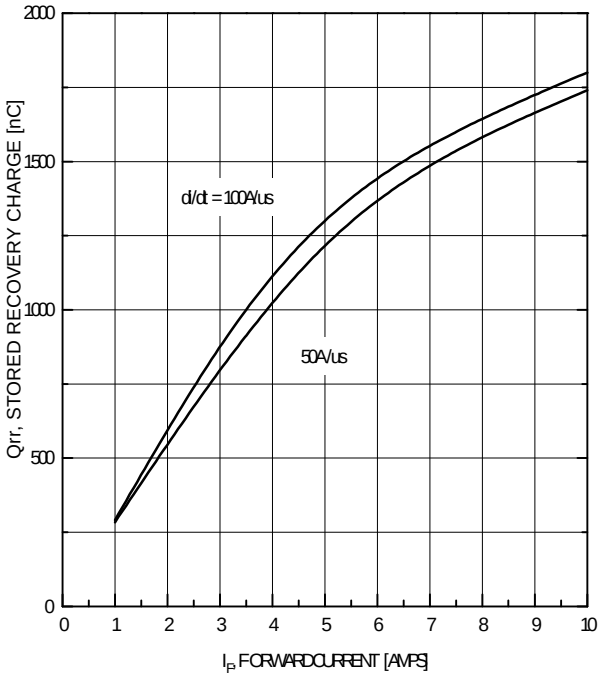
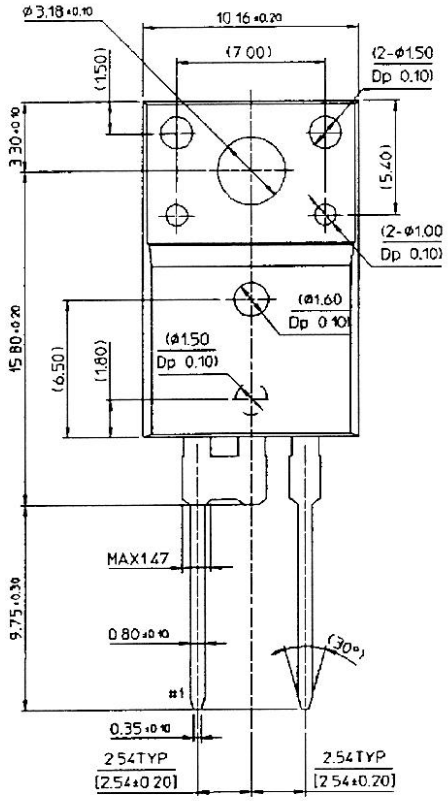
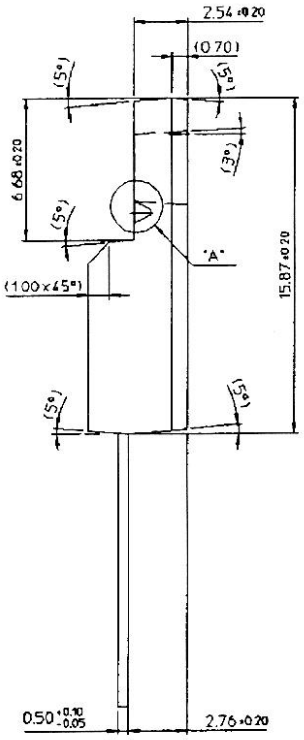


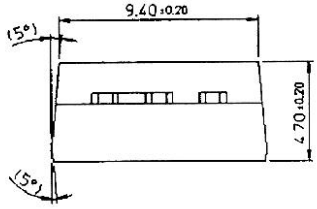
Figure 5. Typical Stored Recovery Charge

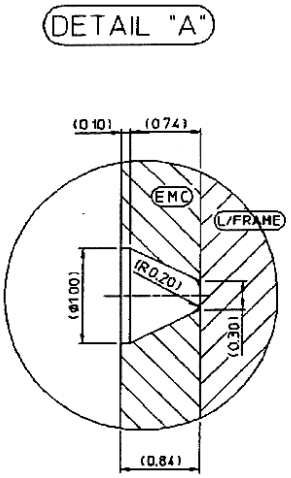
PACKAGE DIMENSION

Unit : mm









NOTE

1. THESE DIMENSIONS DO NOT INCLUDE MOLD PROTRUSION
2. ( ) IS REFERENCE
3. [ ] IS ASSY OUT QUALITY

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