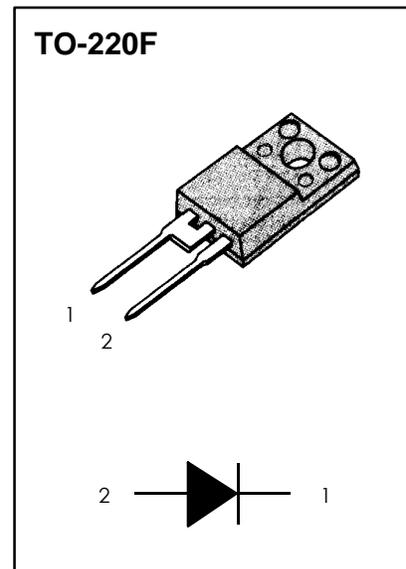


FEATURES

- * Ultrafast with Soft Recovery (T_{rr} < 50ns)
- * Low Forward Voltage (V_F=1.2V at I_F=10A)

APPLICATIONS

- * Power Switching Circuits
- * Output rectifiers
- * Freewheeling Diodes
- * Switching Mode Power Supply



MAXIMUM RATINGS

Rating	Symbol	Value	Units
Peak Repetitive Reverse Voltage	V _{RRM}	400	V
Average Rectified Forward Current, T _C =100 °C	I _{F(AV)}	10	A
Non-repetitive Peak Surge Current (Half-wave, Single Phase, 60Hz)	I _{FSM}	100	A
Operating Junction and Storage Temperature	T _J , T _{STG}	-65 ~ 150	°C

THERMAL CHARACTERISTICS

Thermal Resistance - Junction to Case	R _{θJC}	4.5	°C/W
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ELECTRICAL CHARACTERISTICS

Characteristics	Symbol	Min	Typ	Max	Units
Maximum Instantaneous Forward Voltage (1) ($I_F = 10A, T_C = 100\text{ }^\circ\text{C}$) ($I_F = 10A, T_C = 25\text{ }^\circ\text{C}$)	V_F	- -	- 1.2	1.2 1.4	V
Maximum Instantaneous Reverse Current (1) (Rated DC Voltage, $T_C = 100\text{ }^\circ\text{C}$) (Rated DC Voltage, $T_C = 25\text{ }^\circ\text{C}$)	I_R	- -	- -	100 10	μA
Maximum Reverse Recovery Time ($I_F = 10A, di/dt = -200A/\mu\text{s}$)	t_{rr} I_{rr} Q_{rr}	- - -	- - -	50 4.0 100	ns A nC
Avalanche Energy	W_{AVL}	1.0	-	-	mJ

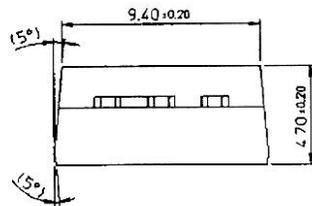
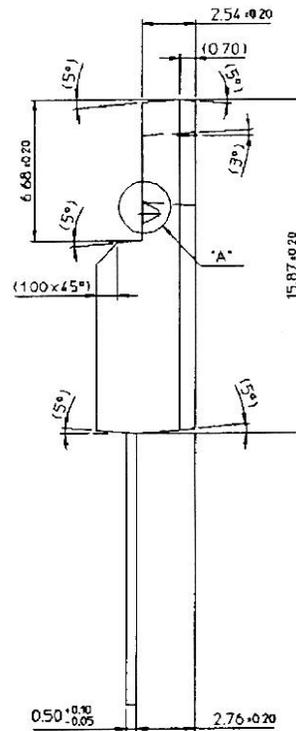
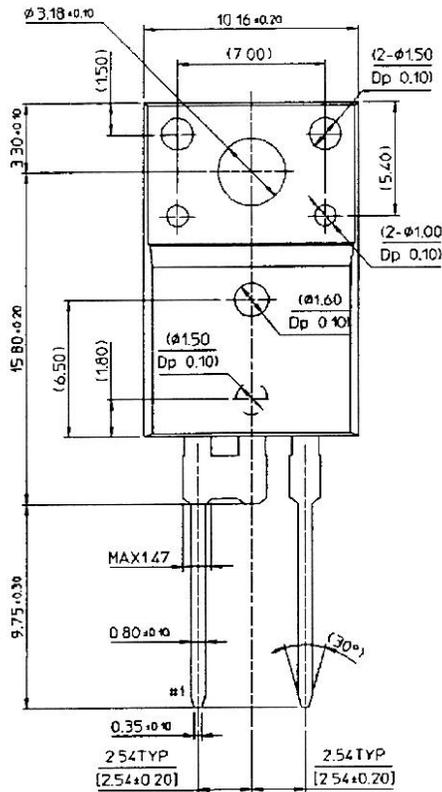
(1) Pulse Test : Pulse Width = 300 μs , Duty Cycle $\leq 2.0\%$

SDS10U40S

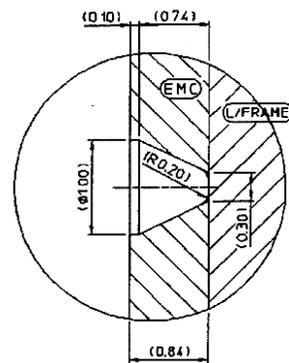
POWER RECTIFIER

PACKAGE DIMENSION

Unit : mm



DETAIL "A"



NOTE

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

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Definition of Terms

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