

Ultrafast Rectifier

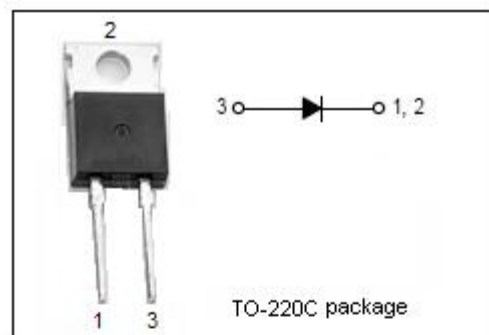
DSEI8-06A

FEATURES

- Ultrafast Recovery Time
- Very short recovery time
- Extremely low switching losses
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for use in switching power supplies and other power Switching applications.

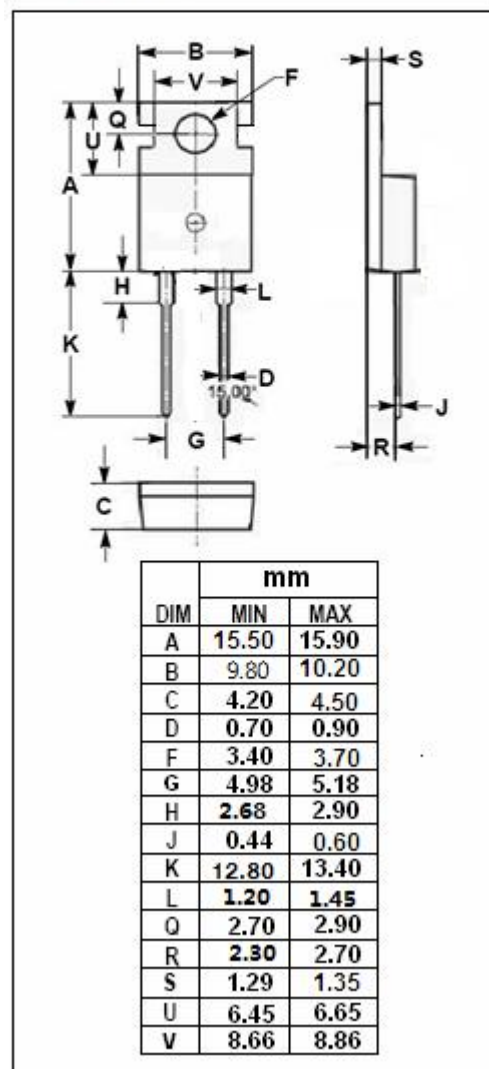


ABSOLUTE MAXIMUM RATINGS($T_a=25^{\circ}\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{RRM} V_{RWM} V_R	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	600	V
$I_{F(AV)}$	Average Rectified Forward Current	8	A
I_{FSM}	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	110	A
T_J	Junction Temperature	-40~150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-40~150	$^{\circ}\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	2.5	$^{\circ}\text{C/W}$



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ELECTRICAL CHARACTERISTICS(T_a=25°C) (Pulse Test: Pulse Width=300 μs, Duty Cycle≤2%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V _F	Maximum Instantaneous Forward Voltage	I _F = 8A ;T _j =25°C I _F = 8A ;T _j =150°C	1.5 1.3	V
I _R	Maximum Instantaneous Reverse Current	V _R = V _{RWM} ;T _j =25°C V _R =0.8*V _{RWM} ;T _j =25°C V _R =0.8* V _{RWM} ;T _j =125°C	20 10 1500	μ A
t _{rr}	Maximum Reverse Recovery Time	I _F =1A	50	ns

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