

Ultra fast Rectifier
DSEC29-06AC
FEATURES

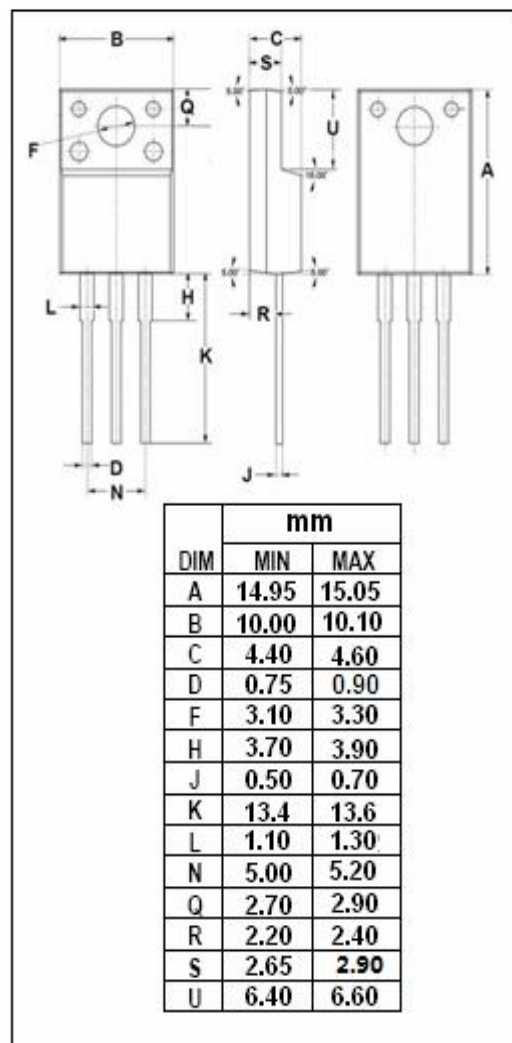
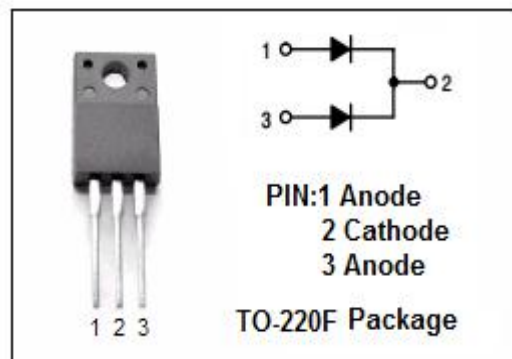
- With TO-220F packaging
- High performance fast recovery diode
- Low loss and soft recovery
- Common cathode
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching power supply
- Power switching circuits
- General purpose

ABSOLUTE MAXIMUM RATINGS(T_a=25°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 @T _c =140°C	15	A
I _{FSM}	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 50Hz)	110	A
T _J	Junction Temperature	-55~150	°C
T _{stg}	Storage Temperature Range	-55~150	°C



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THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R_{thj-c}	Thermal Resistance, Junction to Case pre diode Pre device	10 3	$^{\circ}C/W$

ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}C$) (Pulse Test: Pulse Width=300 μ s, Duty Cycle \leq 2%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	$I_F=15A; T_j=25^{\circ}C; T_j=25^{\circ}C$ $I_F=15A; T_j=25^{\circ}C; T_j=150^{\circ}C$ $I_F=30A; T_j=25^{\circ}C; T_j=25^{\circ}C$ $I_F=30A; T_j=25^{\circ}C; T_j=150^{\circ}C$	2.04 1.34 2.25 1.59	V
I_R	Maximum Instantaneous Reverse Current	$V_R=V_{RWM}; T_j=25^{\circ}C$ $V_R=V_{RWM}; T_j=150^{\circ}C$	100 500	μ A
t_{rr}	Maximum Reverse Recovery Time	$I_F=15A; V_R=300V; diF/dt=200A/\mu$ s	35	ns

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