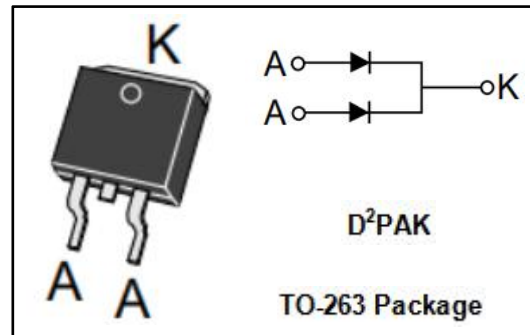


Ultrafast Rectifier
DF20LC20U
FEATURES

- TO-263 package.
- Super fast switching for high efficiency.
- Low reverse leakage.
- High forward surge current capability.
- RoHs Product.
- Low forward voltage drop
- Minimum Lot-to-Lot variations for robust device performance and reliable operation


APPLICATIONS

- Designed for use in switching power supply, PWM pulse width modulator, inverter as a freewheeling and other electronic circuits, high-frequency rectifier diode.

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

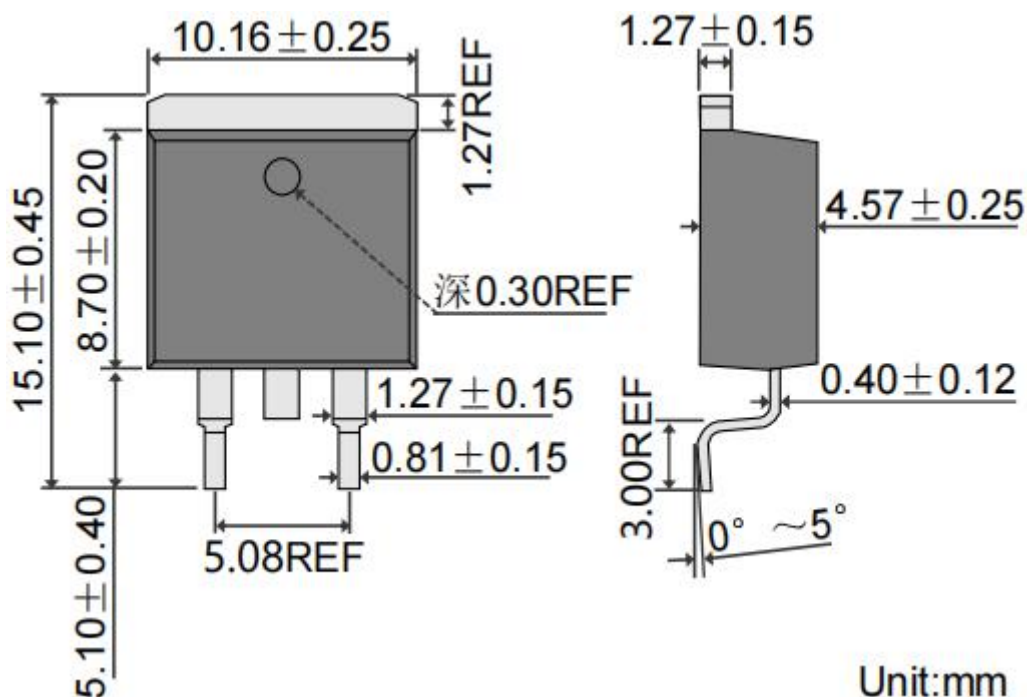
SYMBOL	PARAMETER	VALUE	UNIT
V _{RRM}	Peak Repetitive Reverse Voltage	200	V
I _{F(AV)}	Average Rectified Forward Current	20	A
I _{FSM}	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	140	A
T _J	Junction Temperature	-55~175	°C
T _{stg}	Storage Temperature Range	-55~175	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	1.6	°C/W

Fast Recovery Rectifier
DF20LC20U
ELECTRICAL CHARACTERISTICS($T_a=25^{\circ}\text{C}$) (Pulse Test: Pulse Width=300 μs , Duty Cycle $\leq 2\%$)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	$I_F=10\text{A}; T_j=25^{\circ}\text{C}$ $I_F=10\text{A}; T_j=125^{\circ}\text{C}$	1.0 0.95	V
I_R	Maximum Instantaneous Reverse Current	$V_R=V_{RWM};$ $V_R=V_{RWM}; T_j=125^{\circ}\text{C}$	10 50	μA
t_{rr}	Maximum Reverse Recovery Time	$I_F=1\text{A}; di/dt=50\text{A}/\mu\text{s}$	35	ns


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