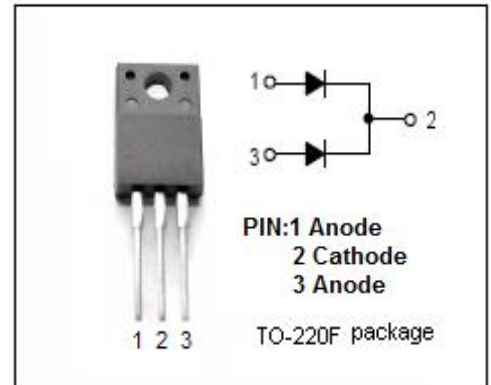


Ultrafast Rectifier
HER1607FCT
FEATURES

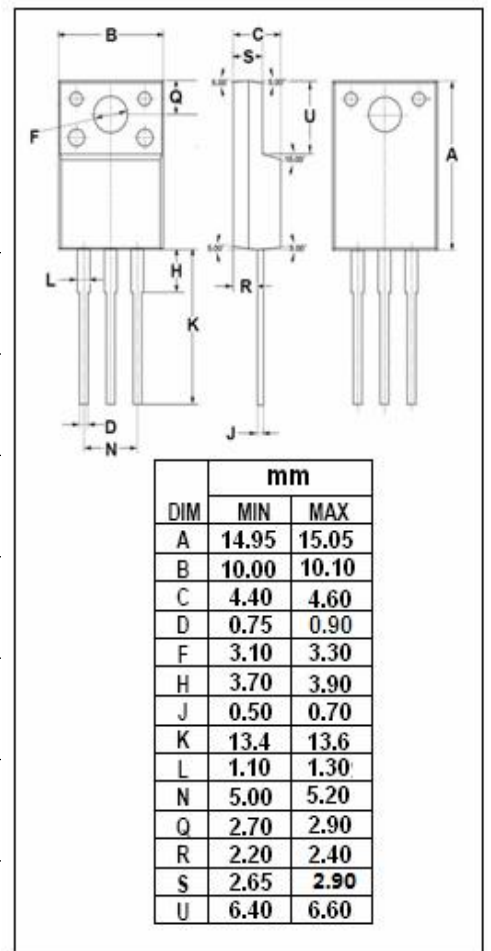
- Ultrafast with soft recovery
- Fast switching for high efficiency
- High current capability
- Low forward voltage drop
- Minimum Lot-to-Lot variations for robust device performance and reliable operation


APPLICATIONS

- Switching power supply
- Power switching circuits

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _R RM V _R WM V _R	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	800	V
I _F (AV)	Average Rectified Forward Current Per Leg Total device	8 16	A
I _{FSM}	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	120	A
P _D	Maximum power dissipation	75	W
T _J	Junction Temperature	-55~150	°C
T _{stg}	Storage Temperature Range	-55~150	°C



Ultrafast Rectifier
HER1607FCT
THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	2.0	°C/W

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$) (Pulse Test: Pulse Width=300 μ s, Duty Cycle \leq 1%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	$I_F=8\text{A}$	1.7	V
I_R	Maximum Instantaneous Reverse Current	$V_R=V_{RWM}, T_j=25^\circ\text{C}$ $V_R=V_{RWM}, T_j=125^\circ\text{C}$	10 500	μ A
t_{rr}	Maximum Reverse Recovery Time	$I_F=0.5\text{A}, I_R=1.0\text{A}$	80	ns

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