

Ultrafast Rectifier

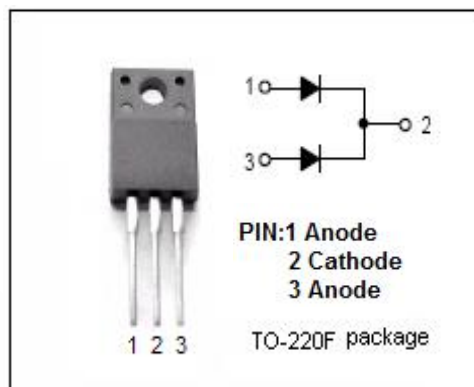
MUR3040FCT

FEATURES

- Ultra-Fast Switching
- High current capability
- Low forward voltage drop
- Low power loss,high efficiency
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching power supply
- Power switching circuits

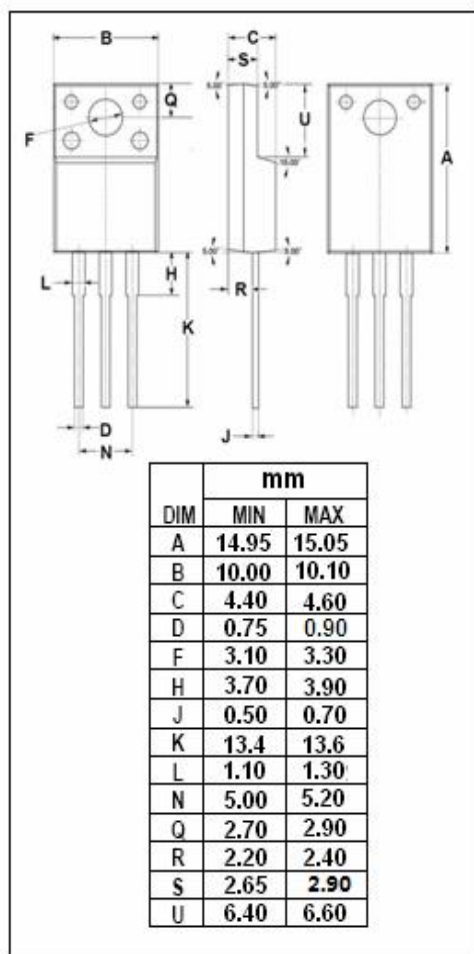


ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V _{RRM} V _{RWM} V _R	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	400	V
I _{F(AV)}	Average Rectified Forward Current	30	A
I _{FSM}	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	300	A
T _J	Junction Temperature	-55~150	℃
T _{stg}	Storage Temperature Range	-55~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance,Junction to Case	2.0	℃/W



Ultrafast Rectifier**MUR3040FCT****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	$I_F = 15\text{A}; T_J = 25^{\circ}\text{C}$	1.3	V
I_R	Maximum Instantaneous Reverse Current	$V_R = V_{RWM}; T_J = 25^{\circ}\text{C}$ $V_R = V_{RWM}; T_J = 125^{\circ}\text{C}$	5 100	μA
t_{rr}	Maximum Reverse Recovery Time	$I_F = 0.5\text{A}; I_R = 1.0\text{A}; I_{rr} = 0.25\text{A}$	35	ns

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