

Ultra-fast Rectifier
Reverse Voltage 600 Volts, Forward Current 20Ampers

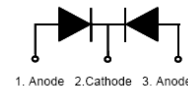
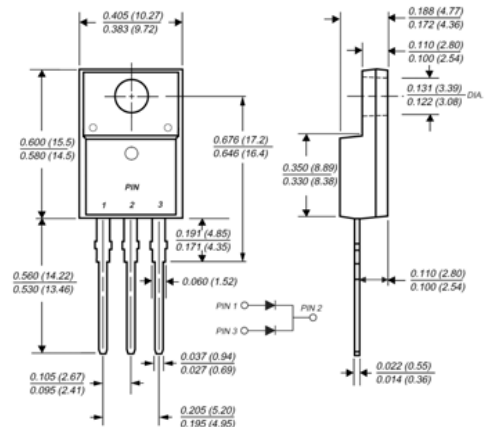
Features

- Ultra-Fast Switching
- High Current Capability
- Low Reverse Leakage Current
- High Surge Current Capability
- Plastic Material has UL Flammability Classification 94V-0
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Applications

- Switching Power Supply
- Power Switching Circuits
- General Purpose

TO-220F



Maximum Ratings

Characteristics	Symbol	Condition	Max.	Units
Peak Repetitive Reverse Voltage	V_{RRM}	-	600	V
Working Peak Reverse Voltage	V_{RWM}			
DC Blocking Voltage	V_R			
Average Rectified Forward Current	$I_{F(AV)}$	50% duty cycle @ $T_C=105^\circ\text{C}$, rectangular wave form	10(Per Leg) 20(Per Device)	A
Peak One Cycle Non-Repetitive Surge Current(Per Leg)	I_{FSM}	8.3ms, Half Sine pulse	110	A

Electrical Characteristics

Characteristics	Symbol	Condition	Typ.	Max.	Units
Forward Voltage Drop(Per Leg)*	V_{F1}	@ 10A, Pulse, $T_J = 25^\circ\text{C}$	1.25	2.2	V
	V_{F2}	@ 10A, Pulse, $T_J = 100^\circ\text{C}$	-	2.0	V
Reverse Current(Per Leg)*	I_{R1}	@ $V_R = \text{rated } V_R, T_J = 25^\circ\text{C}$	0.03	5	μA
	I_{R2}	@ $V_R = \text{rated } V_R, T_J = 100^\circ\text{C}$	-	50	μA
Reverse Recovery Time(Per Leg)	t_{rr}	@ $I_F=500\text{mA}, I_R=1\text{A}, \text{and } I_{rm}=250\text{mA}$	45	50	ns

* Pulse width < 300 μs , duty cycle < 2%



MUR2060FCT

Thermal-Mechanical Specifications

Characteristics	Symbol	Condition	Specification	Units
Junction Temperature	T_J	-	-55 to +150	$^{\circ}\text{C}$
Storage Temperature	T_{stg}	-	-55 to +150	$^{\circ}\text{C}$
Typical Thermal Resistance Junction to Case	$R_{\theta\text{JC}}$	DC operation	4	$^{\circ}\text{C}/\text{W}$

Ratings and Characteristics Curves

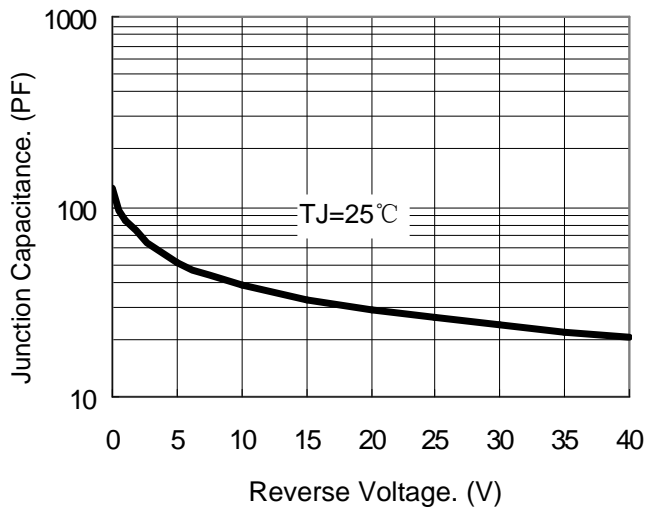


Fig.1-Typical Junction Capacitance

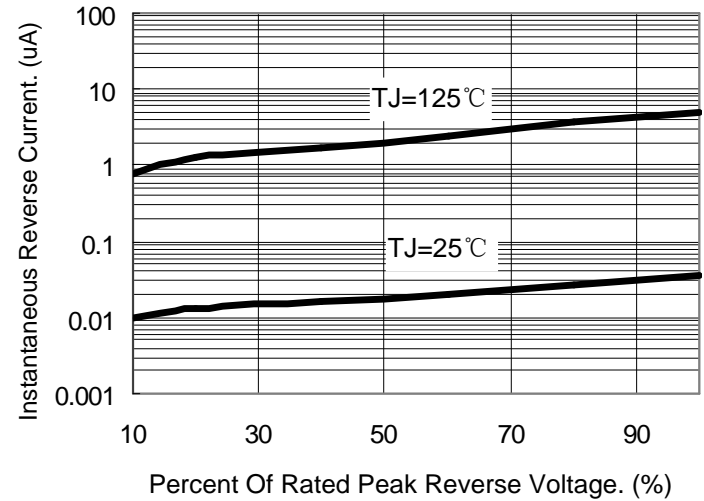


Fig.2-Typical Reverse Characteristics

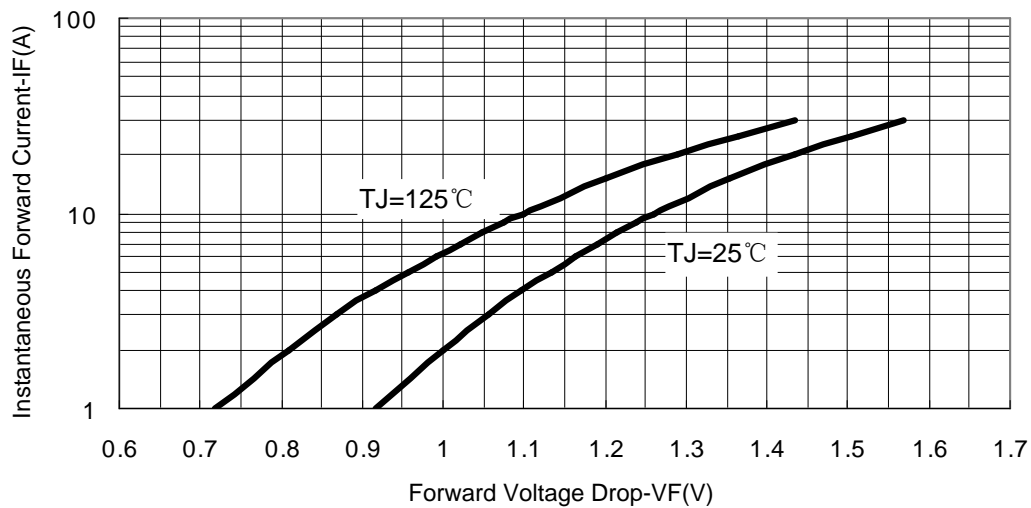


Fig.3-Typical Forward Voltage Drop Characteristics