



MUR2060CT/MUR2060FCT

Ultrafast Recovery Rectifier
Reverse Voltage 600 Volts Forward Current 20 Amperes

Features

- FRED (Planar) wafer construction
- Ultrafast recovery time
- Low forward voltage drop, low power
- High efficiency
- Plastic package has underwriters Laboratory Flammability Classification 94V-0



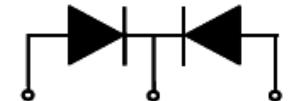
MUR2060CT
Package: TO-220-AB



MUR2060FCT
Package: ITO-220-AB

Mechanical Data

- Case: Epoxy, molded
- Weight: 1.9grams (approximately)
- Finish: all external surfaces corrosion resistant and terminal leads are readily solderable
- Lead temperature for soldering purposes: 260°C max. for 10 sec
- 50 units per plastic tube



1. Anode 2.Cathode 3. Anode

Maximum Ratings & Electrical Characteristics

(TA=25°C unless otherwise noted)

PARAMETER	TEST CONDITIONS		SYMBOL	VALUE	UNIT
Maximum Repetitive Peak Reverse Voltage			V _{RRM}	600	V
Working Peak Reverse Voltage			V _{RWM}	600	V
Maximum DC Blocking Voltage			V _{DC}	600	V
Maximum Average Forward Current at T _c =105°C	Total Device Per Diode		I _{F(AV)}	20 10	A
Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load per Diode			I _{FSM}	125	A
Voltage Rate of Change(rated V _R)			Dv/dt	10000	V/us
Operating Junction Temperature Range			T _J	- 55 to+150	°C
Storage Temperature Range			T _{STG}	- 55 to+150	°C
Maximum Reverse Recover Time (If=0.5Amp, IR=1.0Amp,Irec=0.25Amp)			T _{rr}	50	ns
Maximum Instantaneous Forward Voltage per Leg	I _F =10A I _F =10A	T _c =25°C T _c =125°C	V _F	1.60 1.50	V
Maximum Reverse Current per Leg at Working Peak Reverse Voltage		T _J =25°C T _J =100°C	I _R	10 500	uA uA

Thermal Characteristics TA=25°C unless otherwise noted

Symbol	Parameter	TYP.(MUR2060CT)	TYP.(MUR2060FCT)	Unit
R _{θJC}	Thermal Resistance, Junction to Case per Leg	2.0	4.0	°C /W
R _{θJA}	Thermal Resistance, Junction to Ambient per Leg	62.5	62.5	°C /W

Note: Pulse test:300us pulse width, duty cycle=2%



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Ratings and Characteristics Curves

($T_A = 25^\circ\text{C}$ unless otherwise noted)

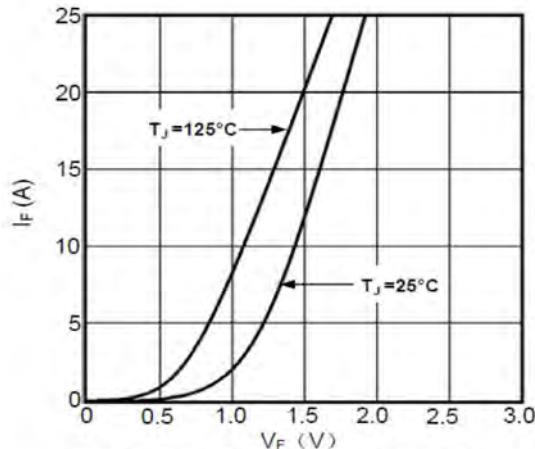


Fig1. Forward Voltage Drop vs Forward Current

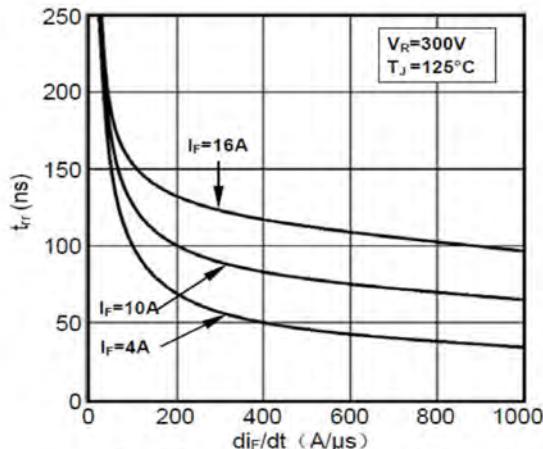


Fig2. Reverse Recovery Time vs di_F/dt

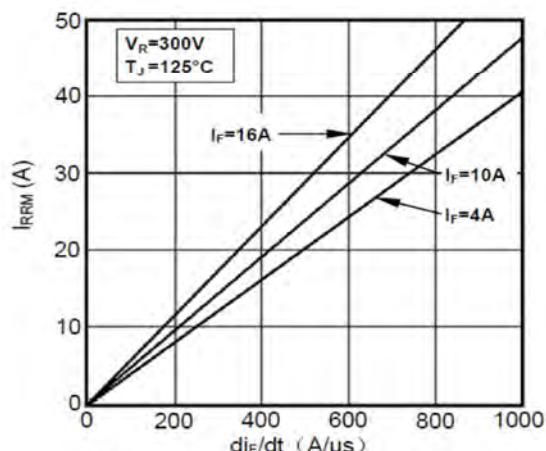


Fig3. Reverse Recovery Current vs di_F/dt

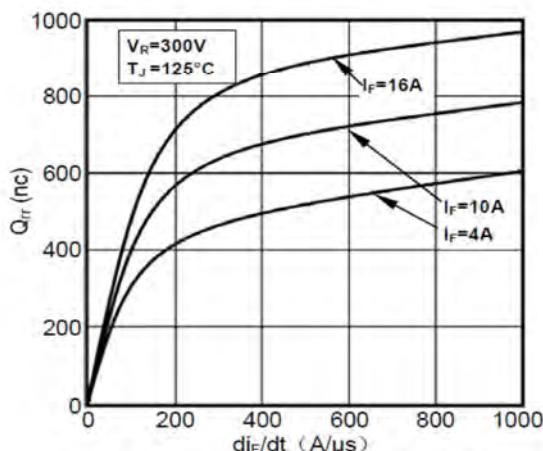


Fig4. Reverse Recovery Charge vs di_F/dt

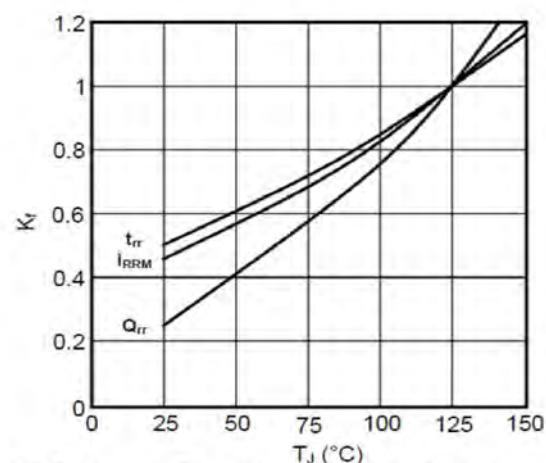


Fig5. Dynamic Parameters vs Junction Temperature

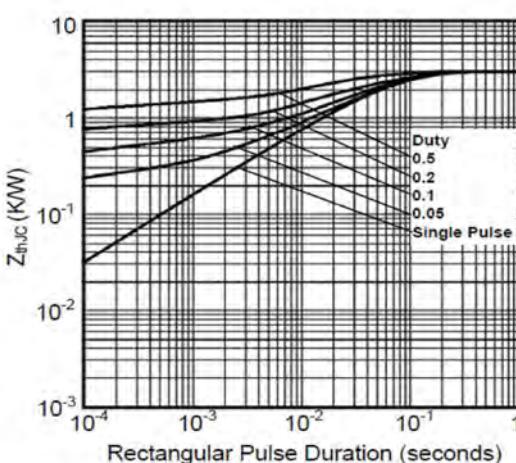


Fig6. Transient Thermal Impedance



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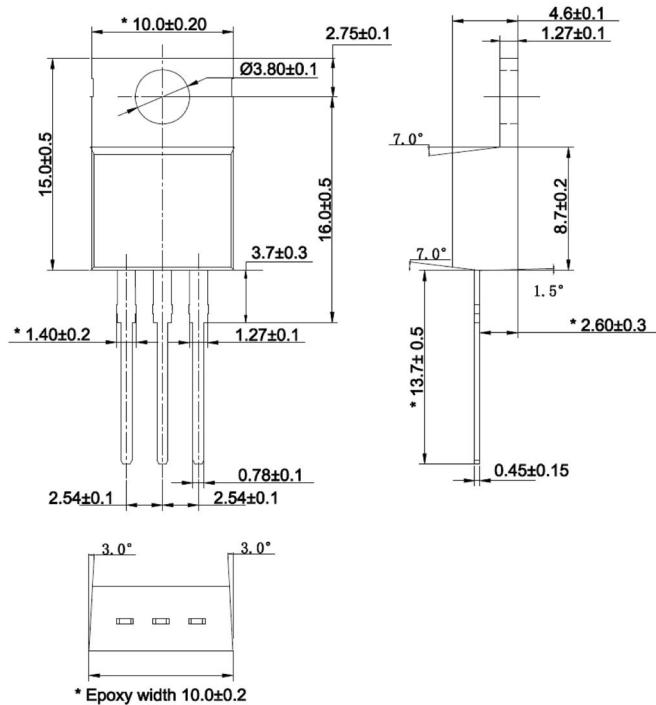
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Package Outline Dimensions

Unit: millimeters

TO-220-AB



ITO-220--AB

