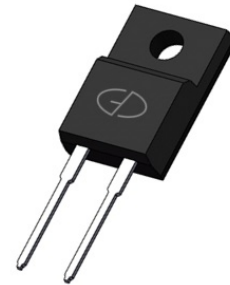


20A,600V Ultrafast Recovery Rectifier

Features

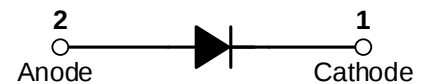
- FRED Wafer Construction
- Low forward drop voltage, low power loss
- High Surge Current Capability
- Plastic package has underwriters Laboratory
Flammability Classification 94V-0
- Halogen-free according to IEC 61249-2-21



ITO-220AC

Applications

- SMPS
- Lighting
- UPS



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
- Shipped 50 units per plastic tube

Maximum Ratings & Electrical Characteristics (T_A=25°C unless otherwise noted)

Parameter	Symbol	MUR2060F	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	600	V
Working peak reverse voltage	V _{RMS}	420	V
Maximum DC blocking voltage	V _{DC}	600	V
Maximum average forward rectified current	I _{F(AV)}	20	A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	150	A
Voltage rate of change (rated V _R)	dv/dt	10000	V/μS
Operating junction temperature range	T _J	-55 to +150	°C
Storage temperature range	T _{STG}	-55 to +150	°C

Electrical Specifications (T _A =25°C unless otherwise noted)					
Parameter	Symbol	Test Conditions	Typ	Max	Unit
Forward Drop Voltage (Note1)	V _F	I _F =20A, T _J =25°C	-	1.80	V
		I _F =20A, T _J =125°C	-	1.70	
Reverse leakage current @V _R (Note2)	I _R	T _J =25°C	-	10	uA
		T _J =125°C	-	500	
Reverse recovery time	t _{rr}	I _F =0.5A, I _R =1.0A, I _{RR} =0.25A	-	40	ns

Thermal-Mechanical Specifications (T _A =25°C unless otherwise noted)			
Parameter	Symbol	Typ	Unit
Thermal Resistance, Junction to Case	R _{θJC}	4.0	°C /W
Thermal Resistance, Junction to Ambient	R _{θJA}	62.5	°C /W

Note:

1. Pulse test with PW=0.3ms, duty cycle=2%
2. Pulse test with PW=30ms

Ratings and Characteristics Curves

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

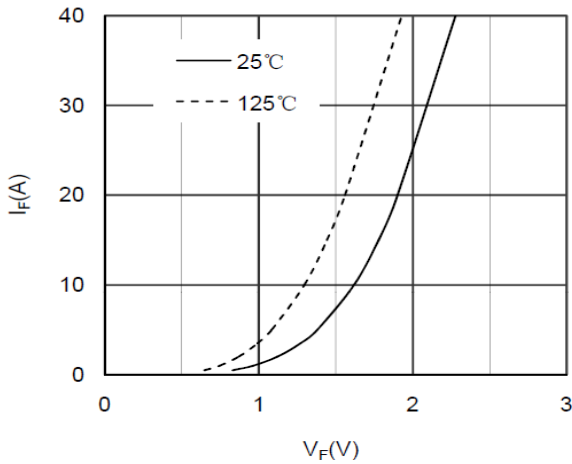


Figure 1. Forward Voltage Drop vs Forward Current

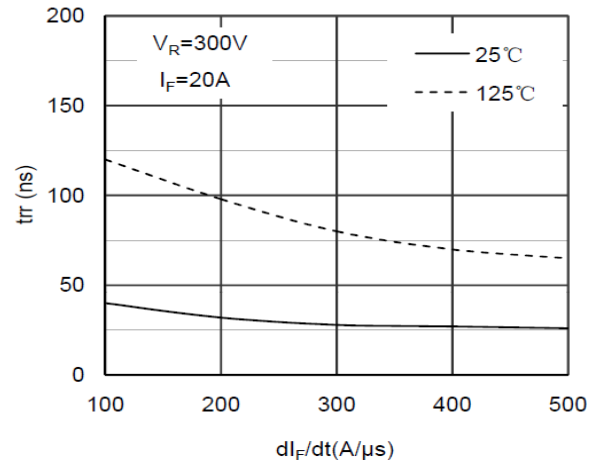


Figure 2. Reverse Recovery Time vs dI_F/dt

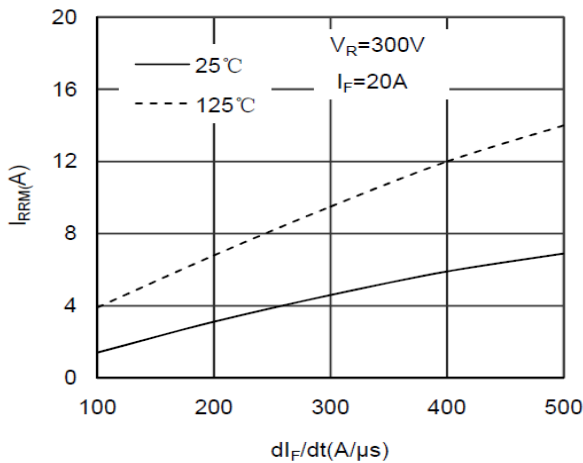


Figure 3. Reverse Recovery Current vs dI_F/dt

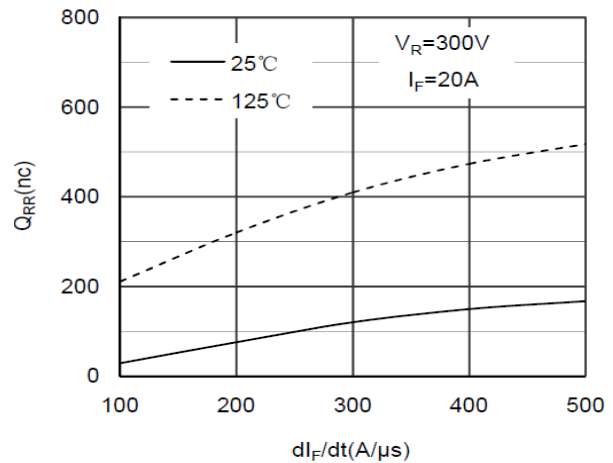


Figure 4. Reverse Recovery Charge vs dI_F/dt

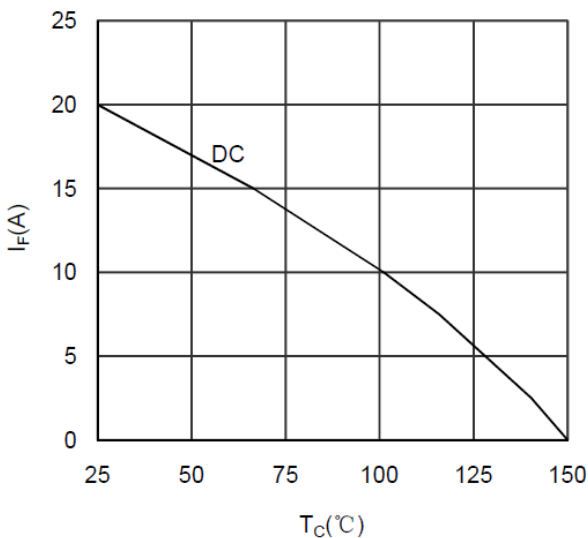


Figure 5. Forward current vs Case temperature

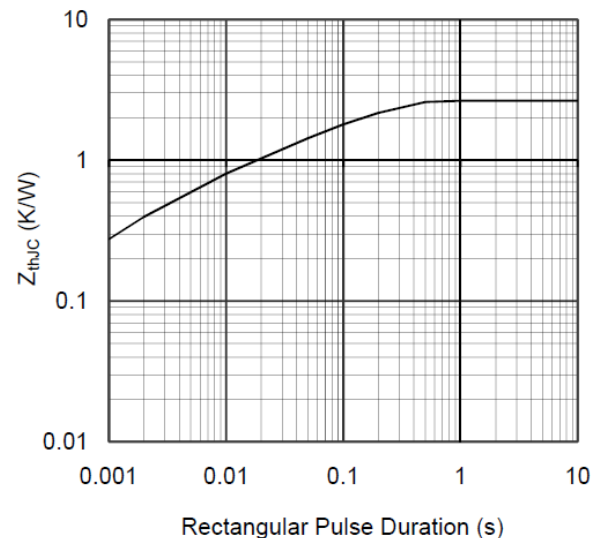
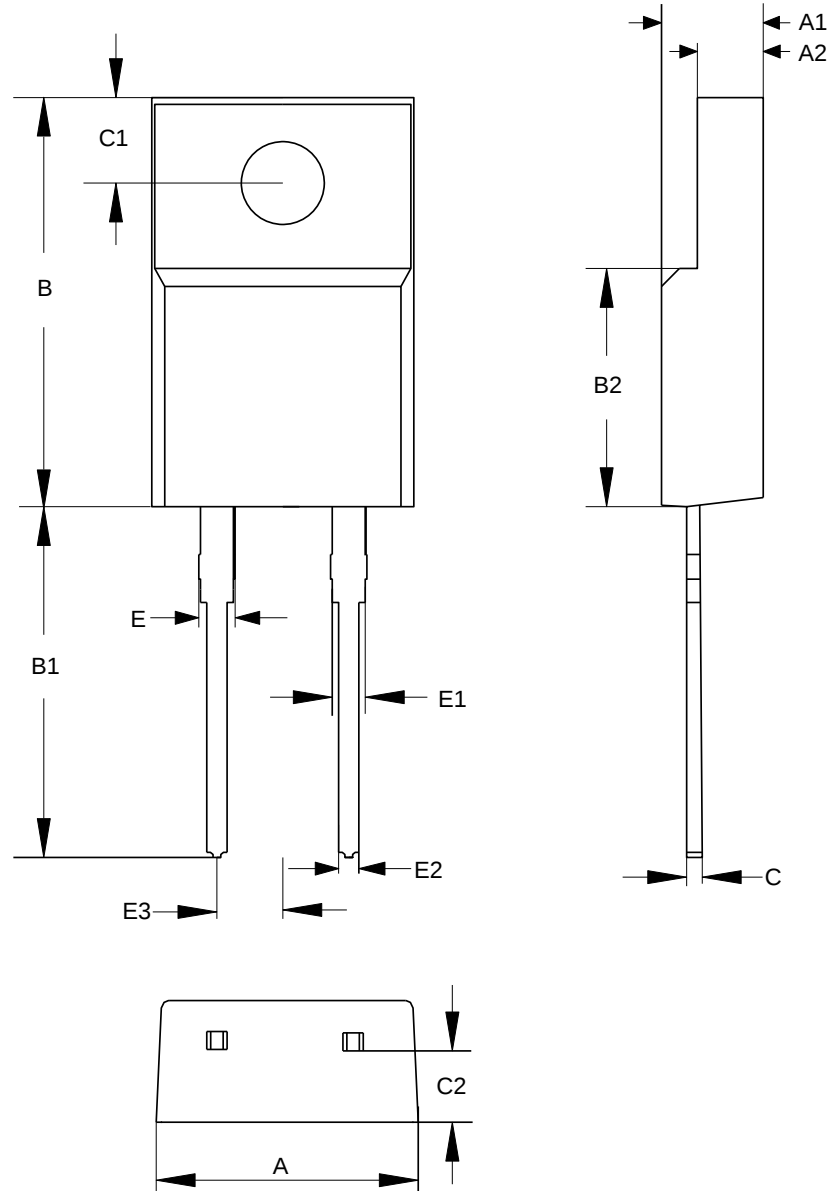


Figure 6. Transient Thermal Impedance

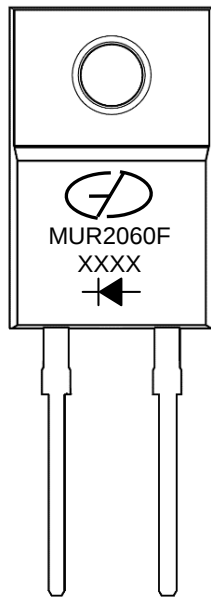
Package Outline Dimensions (Unit: millimeters)

ITO-220AC



ITO-220AC							
	Min.	Nom.	Max.		Min.	Nom.	Max.
A	9.9	10.1	10.3	C1	3.2	3.3	3.4
A1	4.6	4.7	4.8	C2	2.15	2.45	2.75
A2	2.44	2.54	2.64	E	1.15	1.35	1.55
B	15.3	15.8	16.3	E1	1.17	1.27	1.37
B1	13.05	13.55	14.05	E2	0.7	0.8	0.9
B2	8.9	9.2	9.5	E3	2.44	2.54	2.64
C	0.5	0.6	0.7				

Marking Outline



1. Logo Mark: 
2. Part Name: MUR2060F
3. Data Code: XXXX
4. Polarity : 

Revision History

Document Version	Date of release	Description of changes
Rev.A	2017.12.15	Released Datasheet
Rev.B	2021.01.22	Modify document format

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