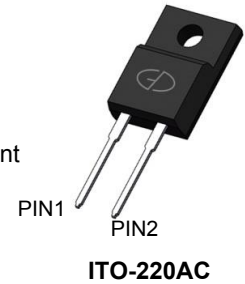


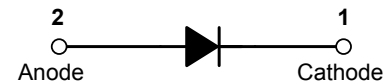
Features

- FRED wafer construction
- Low forward drop voltage, low power loss
- High surge current capability
- Plastic package has underwriters Laboratory Flammability Classification 94V-0, RoHS compliant



Applications

- SMPS
- Lighting
- UPS
- Reverse battery protection



Mechanical Data

- Case: Epoxy, Molded
- Weight: 1.9grams (approximately)
- Finish: All external surfaces corrosion resistant and terminal leads are solderable per J-STD-002 and JESD22-B102
- Lead temperature for soldering purposes: 260°C max. for 10sec

Absolute Maximum Ratings (T_J=25°C unless otherwise specified)

Parameter	Symbol	GSMUR160F	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
Average Rectified Output Current @ 60Hz Sine Wave, R-load, T _c (FIG.1)	I _o	10	A
Surge (Non-Repetitive) Forward Current @ 60Hz Half Sine Wave, 1 Cycle, T _A =25°C	I _{FSM}	120	A
Current Squared Time @ 1ms ≤ t ≤ 8.3ms, T _J =25°C	I ² t	60	A ² S
Typical Junction Capacitance @ 4V, 1MHz	C _J	40	pF
Mounting Torque @ Recommend Torque: 5kg.cm	Tor	8	kg.cm
Thermal Resistance, Between Junction and Ambient	R _{θJA}	50	°C/W
Thermal Resistance, Between Junction and Case	R _{θJC}	4	
Junction Temperature	T _J	-55 to +175	°C
Storage Temperature	T _{STG}	-55 to +175	°C

**Electrical Characteristics**

Parameter	Symbol	Test Conditions	Typ	Max	Unit
Instantaneous Forward Voltage Drop Per Diode	V_{FM}	$I_{FM}=10A, T_J=25^{\circ}C$	1.45	1.6	V
		$I_{FM}=10A, T_J=150^{\circ}C$	1.16	1.32	
DC Reverse Current at Rated DC Blocking Voltage Per Diode	I_{RRM1}	$V_{RM}=V_{RRM}, T_J=25^{\circ}C$	-	5	uA
	I_{RRM2}	$V_{RM}=V_{RRM}, T_J=150^{\circ}C$	15	200	
Reverse Recovery Time	T_{RR}	$I_F=0.5A, I_{RM}=1A,$ $I_{RR}=0.25A, T_J=25^{\circ}C$	25	35	ns
		$T_J=25^{\circ}C$	90	-	
Reverse Recovery Charge	Q_{rr}	$T_J=25^{\circ}C$	200	-	nC
		$T_J=125^{\circ}C$			

Typical Electrical and Thermal Characteristic Curves

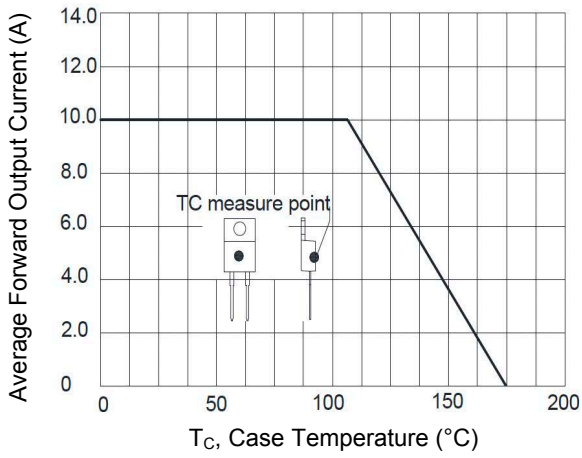


Figure 1. I_o vs. T_c

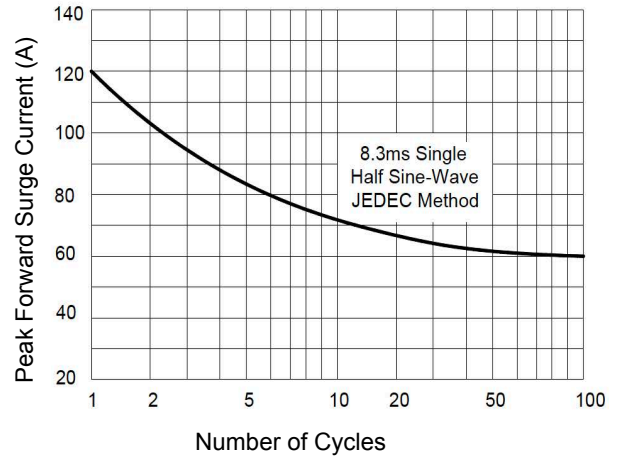


Figure 2. Surge Forward Current Capability

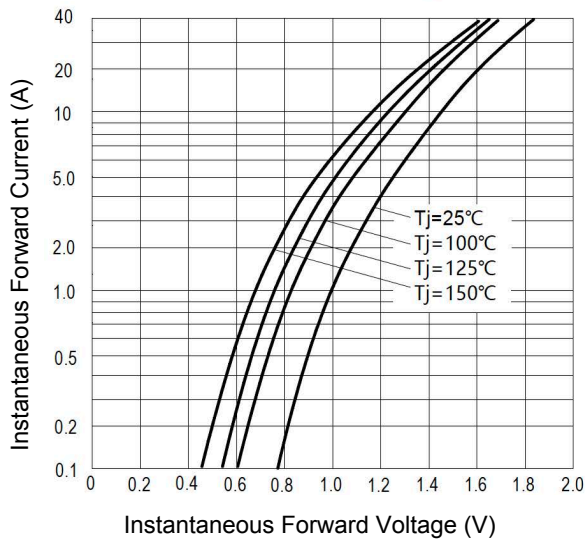


Figure 3. Forward Voltage

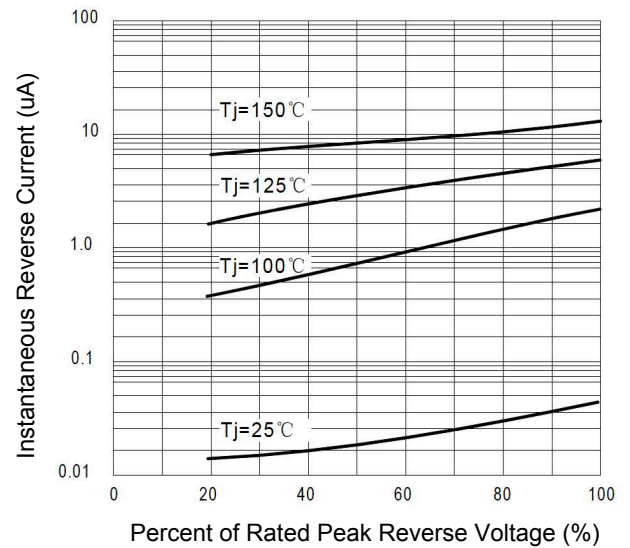
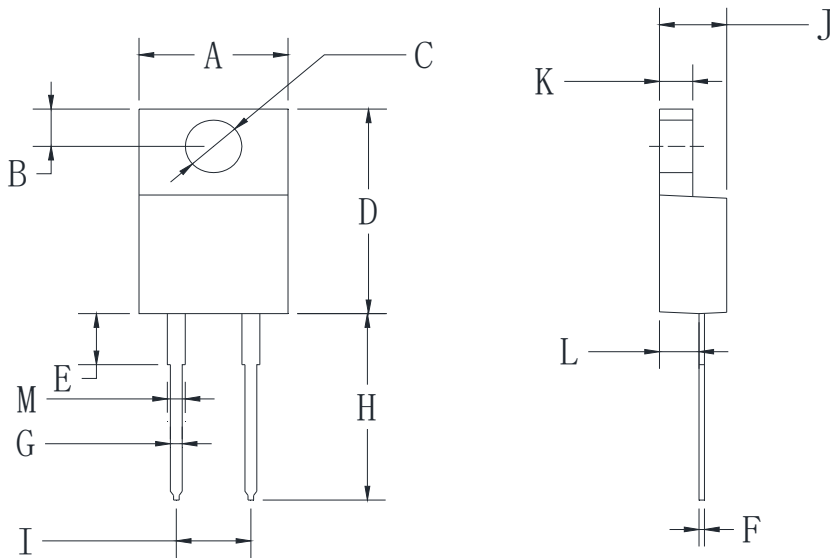


Figure 4. Instantaneous Reverse Characteristics

**Package Outline Dimensions (ITO-220AC)**

Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	9.800	10.200	0.386	0.402
B	2.250	2.750	0.089	0.108
C	2.950	3.450	0.116	0.136
D	14.750	15.250	0.581	0.600
E	3.500	4.100	0.138	0.161
F	0.450	0.750	0.018	0.030
G	0.450	0.750	0.018	0.030
H	13.350	14.150	0.526	0.557
I	4.970	5.230	0.196	0.206
J	4.300	4.800	0.169	0.189
K	2.500	2.740	0.098	0.108
L	2.580	2.820	0.102	0.111
M	1.030	1.430	0.041	0.056

Order Information

Device	Package	Marking	Carrier	Quantity
GSMUR1060F	ITO-220AC	MUR1060F	Tube	50pcs / Package