

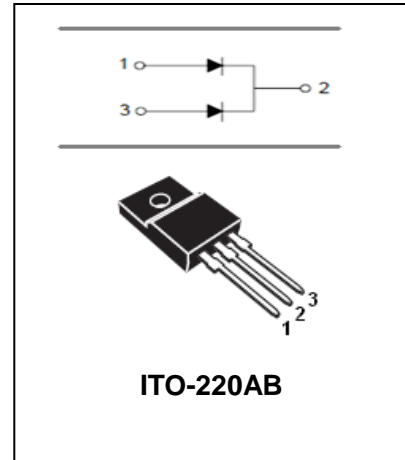
SUPER FAST RECTIFIER

MUR1020FC-MUR1060FC

FEATURES

- Low cost.
- Low Leakage.
- Low forward voltage drop.
- High current capability.
- Easily cleaned with Alcohol, Isopropanol and similar solvents.
- The Plastic Material Carries U/L Recognition 94V-0.

HF



Ordering Information

Part Number	Package	Shipping	Marking Code
MUR1020FC	ITO-220AB	50/Tube	MUR1020FC
MUR1030FC	ITO-220AB	50/Tube	MUR1030FC
MUR1040FC	ITO-220AB	50/Tube	MUR1040FC
MUR1060FC	ITO-220AB	50/Tube	MUR1060FC

MAXIMUM RATING operating temperature range applies unless otherwise specified

Symbol	Parameter	MUR 1020 FC	MUR 1030 FC	MUR 1040 FC	MUR 1060 FC	Units
V_{RRM}	Recurrent Peak Reverse Voltage	200	300	400	600	V
V_{RMS}	RMS Voltage	140	210	280	420	V
V_{DC}	DC Blocking Voltage	200	300	400	600	V
$I_{F(AV)}$	Average Forward Rectified Current @ $T_A=100^\circ\text{C}$	10				A
I_{FSM}	Peak Forward Surge Current 8.3ms Single Half-Sine-wave Superimposed On Rated Load	50				A
$R_{\theta JC}$	Thermal Resistance Junction to Case	4				$^\circ\text{C/W}$
T_J, T_{STG}	Operating junction and Storage temperature Range	-55 to +150				$^\circ\text{C}$

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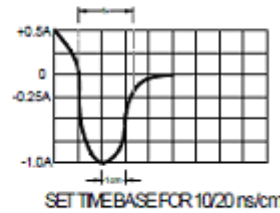
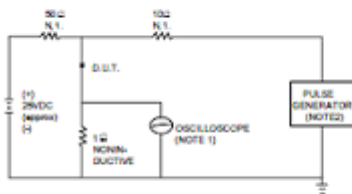
MUR1020FC-MUR1060FC

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	MAX			UNIT
			MUR 1020FC	MUR1030FC- MUR1040FC	MUR 1060FC	
Instantaneous Forward Voltage	V_F	$I_F=5A$	0.98	1.3	1.5	V
Reverse Current	I_R	$V_R=V_{RRM}, T_A=25^\circ C$ $V_R=V_{RRM}, T_A=150^\circ C$	5.0 250	10 500		μA
Reverse Recovery Time	t_{rr}	$I_F=0.5A, I_R=1A,$ $I_{rr}=0.25A$	25	50		ns

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

FIG.1 – TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



NOTES: 1. RISE TIME = 7ns MAX INPUT IMPEDANCE = 1MΩ, 22pF.
 2. RISE TIME = 10ns MAX SOURCE IMPEDANCE = 50 Ω.

FIG.2 – TYPICAL FORWARD CHARACTERISTIC

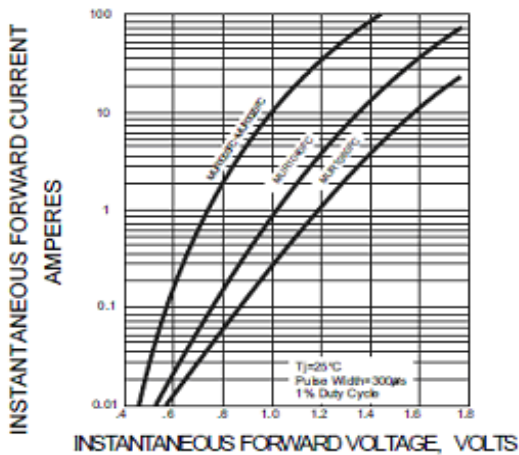
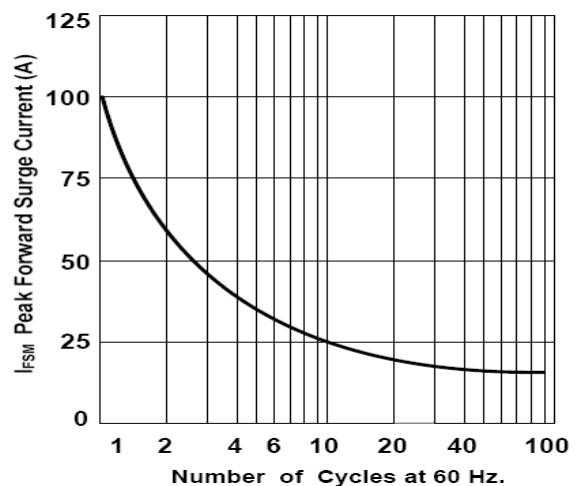


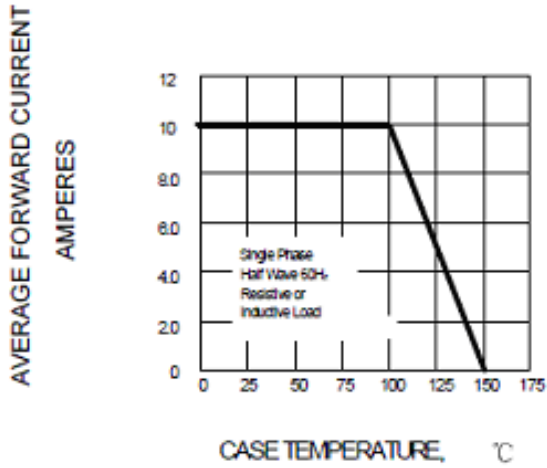
FIG.3-PEAK FORWARD SURGE CURRENT



SUPER FAST RECTIFIER

MUR1020FC-MUR1060FC

FIG.4 FORWARD DERATING CURVE



PACKAGE OUTLINE

Plastic surface mounted package

ITO-220AB

