MUR1020FCT THRU MUR1060FCT

SUPER FAST RECTIFIERS

Reverse Voltage - 200 to 600 Volts Forward Current - 10.0 Amperes

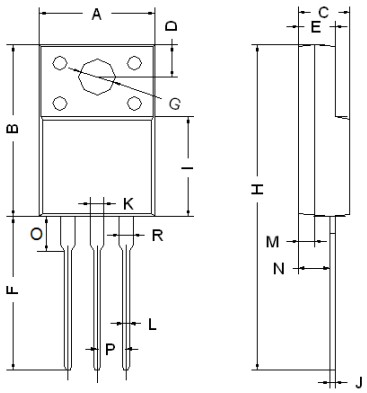
FEATURES

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

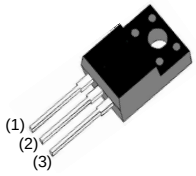
MECHANICAL DATA

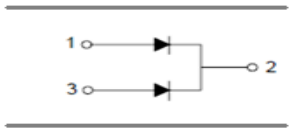
Case: TO-220F
Molding Compound: UL Flammability Classification Rating 94V-0
Terminals: Matte tin-plated leads; solderability-per MIL-STD-202, Method 208

TO-220F



TO-220F		
Dim	Min	Max
A	9.80	10.30
B	15.20	15.80
C	4.37	4.77
D	2.90	3.30
E	2.50	2.90
F	12.90	13.50
G	3.10	3.30
H	28.40	29.16
I	8.40	9.10
J	0.35	0.58
L	0.68	0.94
M	1.30	1.50
N	2.40	2.60
O	2.60	3.10
P	2.40	2.60
K/R	1.10	1.32
All Dimensions in mm		





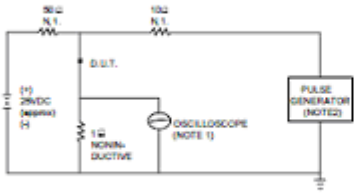
MAXIMUM RATING operating temperature range applies unless otherwise specified

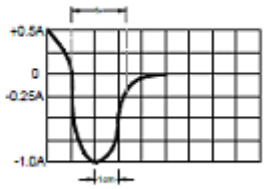
Symbol	Parameter	MUR1020 FCT	MUR1030 FCT	MUR1040 FCT	MUR1060 FCT	Unit
V_{RRM}	Rcurrent Peak Reverse Voltage	200	300	400	600	V
V_{RMS}	RMS Voltage	140	210	280	420	V
V_{DC}	DC Blocking Voltage	200	300	400	600	V
$I_{F(AV)}$	Average Forward Rectified Current @T_A=100℃	10.0				A
I_{FSM}	Peak Forward Surge Current 8.3ms Single Half-sine-wave superimposed on Rsted Load	50				A
I_R	Reverse Current $V_R=V_{RRM}$, T_A=25℃ $V_R=V_{RRM}$, T_A=150℃	5.0 250	10 500			μA
V_F	Forward Voltage I_F=5A	0.98	1.30		1.50	V
t_{rr}	Reverse Recovery Time I_F=0.5A,I_R=1A,I_{rr}=0.25A	25	50			ns
$R_{\theta JC}$	Typical Thermal Resistance Junction to Case	4.0				℃/W
T_j T_{stg}	Operating Junction and StorageTemperature Range	-55 to +150				℃

Note1：Pulse test:pulse width=300μs,duty cycl≤2.0%

TYPICAL CHARACTERISTICS @ Ta=25℃ 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.

SET TIME BASE FOR 10/20 ns/cm

FIG.2 – TYPICAL FORWARD CHARACTERISTIC

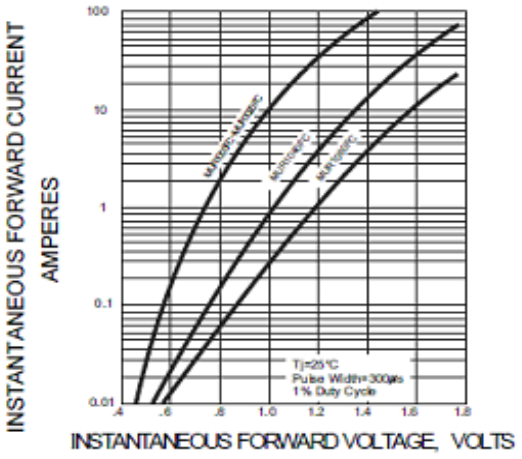


FIG.3-PEAK FORWARD SURGE CURRENT

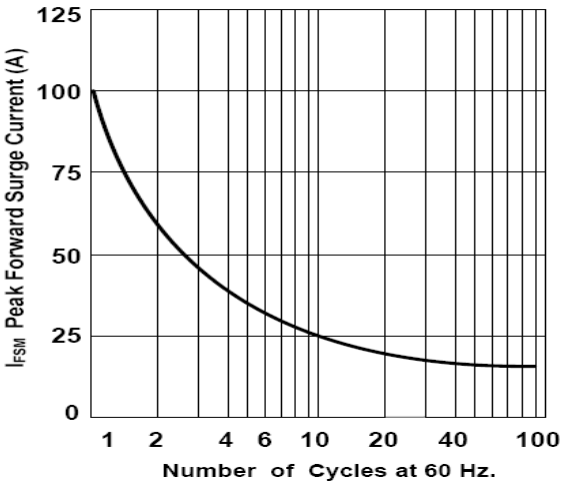


FIG.4-FORWORD DERATING CURVE