

**FEATURES**

- Glass passivation chip junction.
- Fast switching for high efficiency
- High reliability
- Low forward voltage ,high current capacity Mechanical Data
- Case:TO-220AB molded plastic, Lead-free package
- Epoxy: UL 94V-0 rate flame retardant
- Terminals: Pure tin plate, lead free, solderable per MIL-STD-202, method 208 guaranteed
- Polarity: as marked

**Product Description**

Designer for used the switching power supply. Inverter, free wheeling, and polarity protection application.

产品特性: F20C20C、F20C20A为高效超快快恢复整流二极管: 20A, 200V  
 代替型号: MUR2020系列; ER2000系列...  
 应用领域: 开关电源、逆变器、免费续流和极性保护应用  
 应用范围: PC电源、开关电源、电动车充、电动工具、汽车功放等产品; 小功率电焊机广泛应用...

Characteristics	Symbol	Typical data	Final Spec	Units
Peak Repetitive Reverse Voltage	$V_{RRM}$	250~350	230	V
Working Peak Reverse Voltage	$V_{RWM}$			
DC Blocking Voltage	$V_R$			
RMS reverse Voltage	$V_{R(RMS)}$	150		
Maximum instantaneous forward voltage ( $I_F=10A, T_C=25^\circ C$ )	$V_F$	0.95~1.05	1.1	
Average Rectifier Forward Current Per Leg $T_C=125^\circ C$ Total Device	$I_{F(AV)}$		10 20	A
Peak Repetitivity Forward Current (Rate Vr, Square Wave,20kHz)	$I_{FM}$		20	
Non-Repetitivity Peak Surge Current Maximum Instantaneous Forward	$I_{FSM}$		175	
Maximum Instanteous Reverse Current (Rated DC Voltage, $T_C=25^\circ C$ ) (Rated DC Voltage, $T_C=125^\circ C$ )	$I_R$	$\leq 1$	10 200	$\mu A$
Reverse Recovery Time ( $I_F=0.5A, I_R=1, I_{rr}=0.25A$ )	$T_{rr}$	60~80	150	nS
Typical Juntion Capocitance (Reverse Voltage of 4 volts & f=1MHz)	$C_p$		55	pF
Operation and Storage Temp Range	$T_J \& T_{stg}$		-65~+150	$^\circ C$

FIG-1 TYPICAL FORWARD CHARACTERISTICS

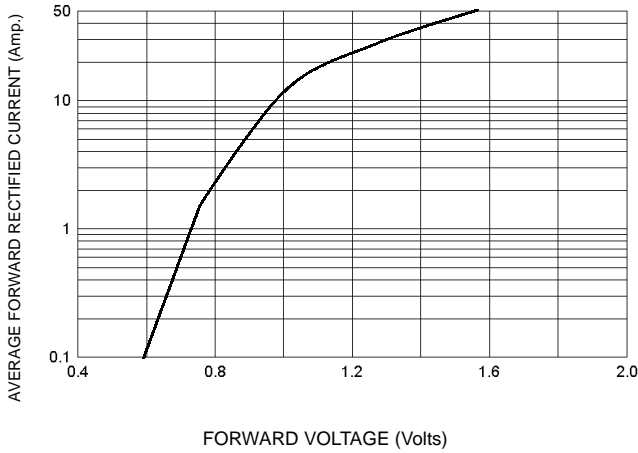


FIG-3 FORWARD CURRENT DERATING CURVE

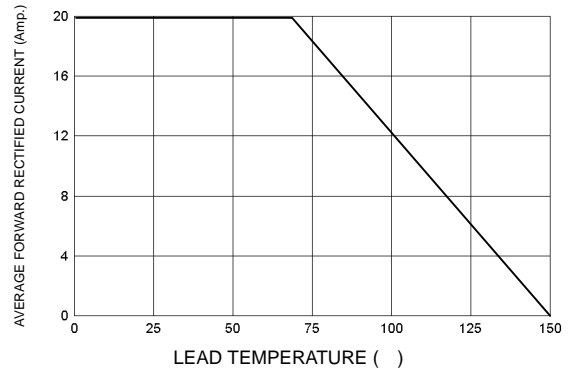


FIG-2 TYPICAL REVERSE CHARACTERISTICS

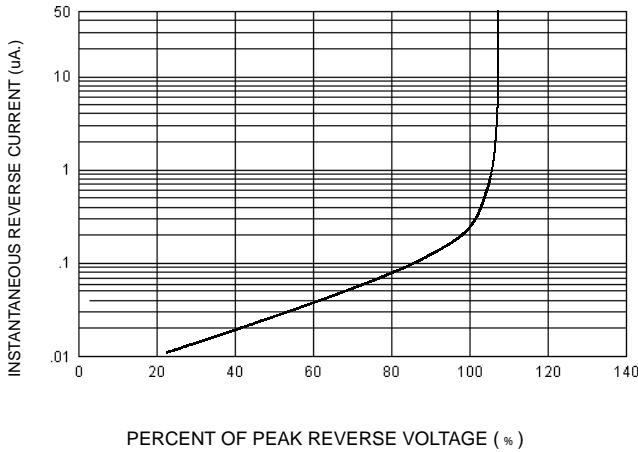


FIG-4 TYPICAL JUNCTION CAPACITANCE

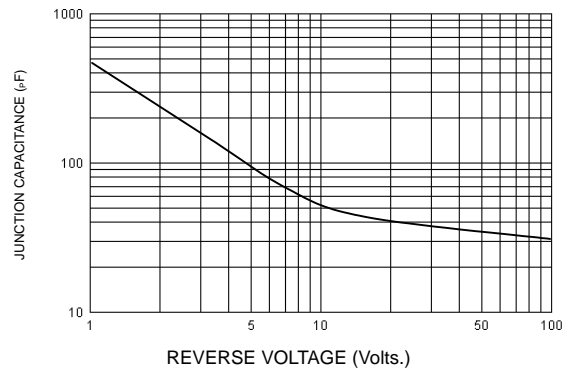
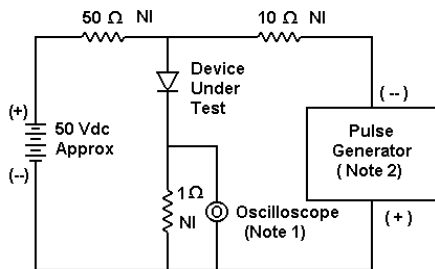
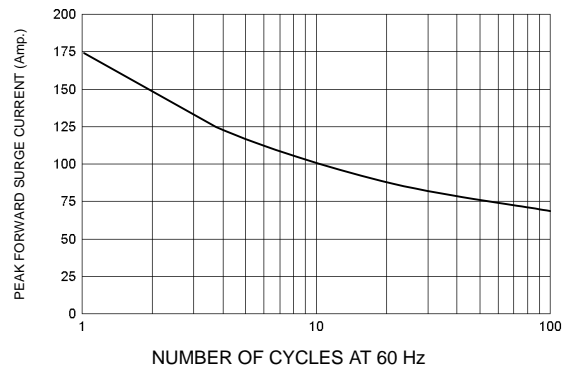
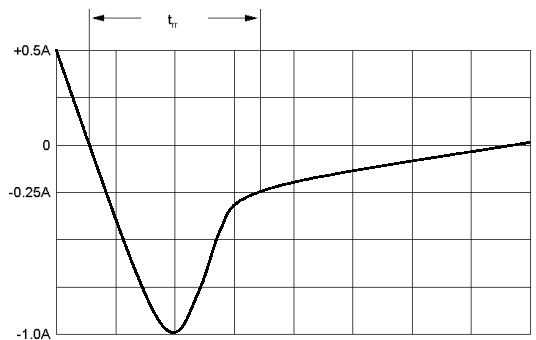


FIG-5 PEAK FORWARD SURGE CURRENT

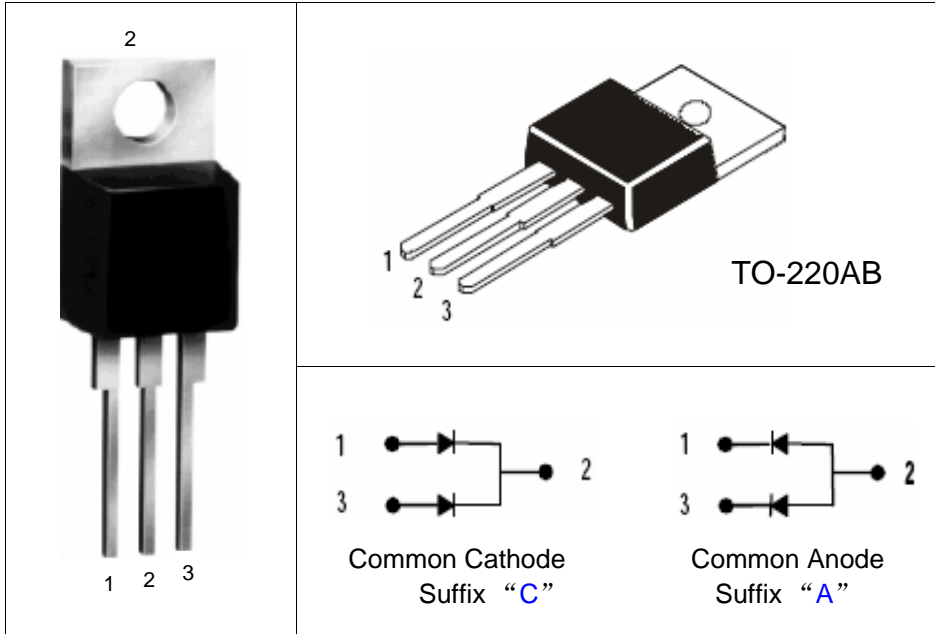


Notes:  
1. Rise Time = 7 ns max. Input Impedance = 1 MΩ, 22 pF  
2. Rise Time = 10 ns max. Input Impedance = 50 Ω



Set time base for 20/50 ns/cm

FIG-6 Reverse Recovery Time Characteristic and Test Circuit Diagram

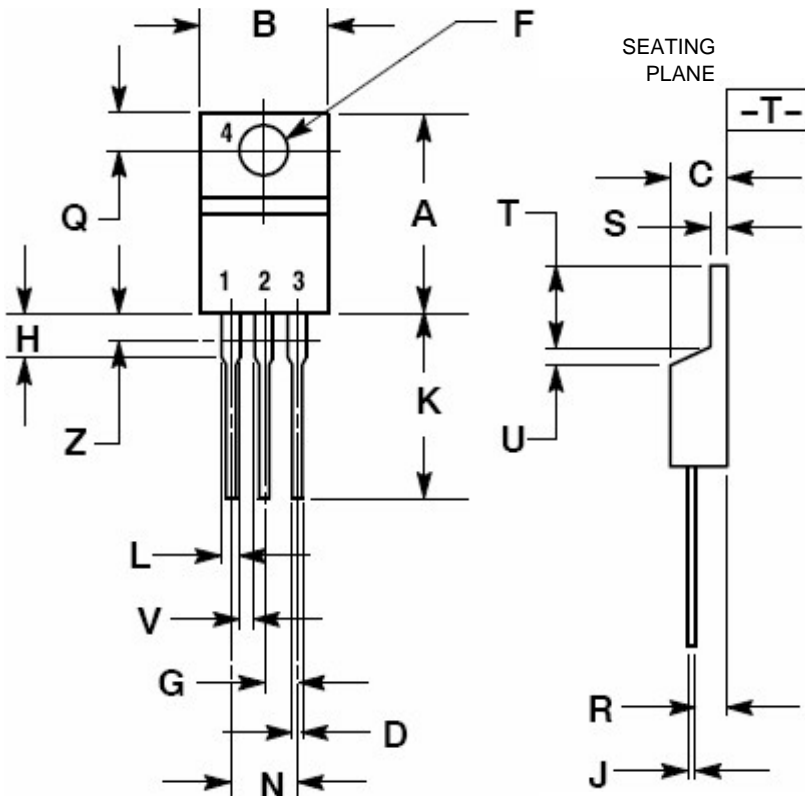


**TO-220AB**  
Lead-free package  
无铅环保封装

极性说明:  
F20C20**C**: 共阴  
F20C20**A**: 共阳

包装规格:  
管装、盒装  
每管50只  
每盒1000只  
每箱5000只

**MECHANICAL DATA**      **Package: TO-220AB**  
**Package Dimensions**      **Dimensions in millimeters**



DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.570	0.620	14.48	15.75
B	0.380	0.405	9.660	10.28
C	0.160	0.190	4.070	4.820
D	0.025	0.035	0.640	0.880
F	0.142	0.161	3.610	4.090
G	0.095	0.105	2.420	2.660
H	0.110	0.155	2.800	3.930
J	0.014	0.025	0.360	0.640
K	0.500	0.562	12.70	14.27
L	0.045	0.060	1.150	1.520
N	0.190	0.210	4.830	5.330
Q	0.100	0.120	2.540	3.040
R	0.080	0.110	2.040	2.790
S	0.045	0.055	1.150	1.390
T	0.235	0.255	5.970	6.470
U	0.000	0.050	0.000	1.270
V	0.045	---	1.150	---
Z	---	0.080	---	2.040



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