H S

F12C20CT

DATA SHEET

FAST RECOVERY RECTIFIERS

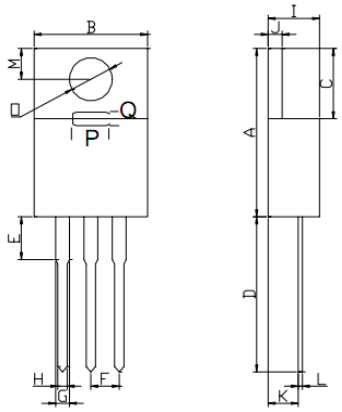
VOLTAGE	200 Volts	CURRENT	12.0 Amperes	TO-220AB	Unit:mm

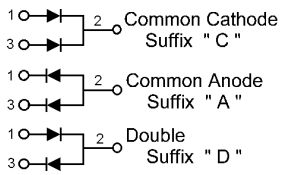
FEATURES

- Low Forward Voltage.
- Low Reverse Leakage Current.
- Fast Switching for High Efficiency.
- Low Forward Voltage , High Current Capability.

MECHANICAL DATA

- Case: TO-220AB Molded Plastic
- Polarity: Symbols molded or marked on body
- Mounting position : Any





DIM	MILLIMETERS	
	MIN	MAX
A	14.68	15.32
B	9.78	10.42
C	6.01	6.52
D	13.06	14.62
E	3.57	4.07
F	2.42	2.66
G	1.12	1.35
H	0.72	0.96
I	4.22	4.98
J	1.14	1.36
K	2.20	2.97
L	0.33	0.55
M	2.48	2.98
O	3.70	3.90
P	3.50	3.70
Q	1.20	1.40

In compliance with EU RoHs 2002/95/EC directives

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ambient temperature unless otherwise specified.

Characteristic	Symobl	F12C20CT	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	VRRM VRWM VR	200	V
Maximum RMS Voltage	VRMS	140	V
Maximum Average Forward Rectified Current	I(AV)	12	A
Non-Repetitive Peak Surge Current (Surge applied at rate load conditions halfware, single phase, 60Hz)	IFSM	100	A
Maximum forward voltage IF=6A TJ= 25℃	VF	1.3	V
Maximum DC Reverse Current @TC=25℃ at Rated DC Blocking Voltage @TC=125℃	IR	5 100	uA
Operating Temperature Range	TJ	-65to+150	℃
Storage Temperature Range	TSTG	-65to+150	℃
Reverse Recovery Time (IF = 0.5 A, IR=1.0A , Irr=0.25 A)	TRR	150	NS
Typical Junction Capacitance (Reverse Voltage of 4 volts & f=1 MHz)	Cp	55	PF

FIG-1 TYPICAL FORWARD CHARACTERISITICS

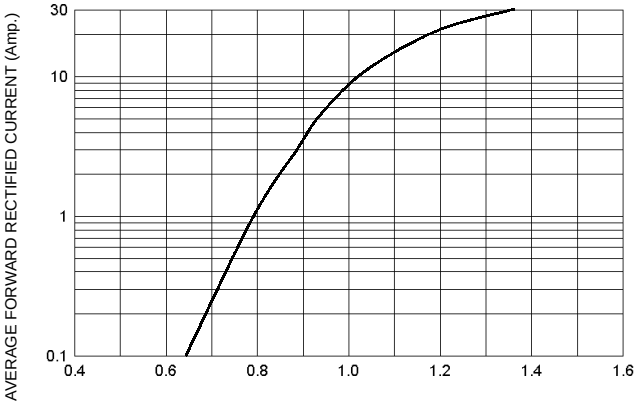


FIG-2 TYPICAL REVERSE CHARACTERISTICS

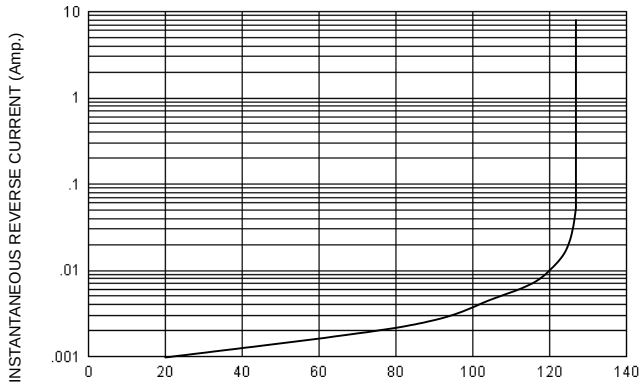


FIG-3 FORWARD CURRENT DERATING CURVE

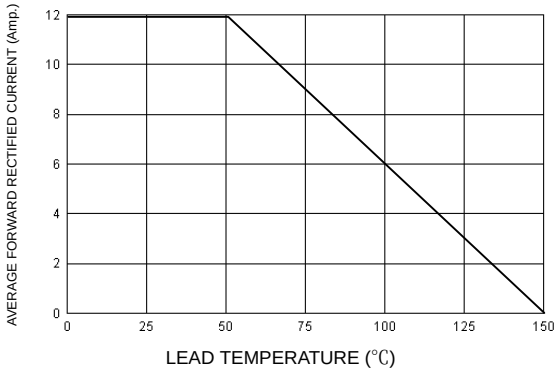


FIG-4TYPICAL JUNCTION CAPACITANCE

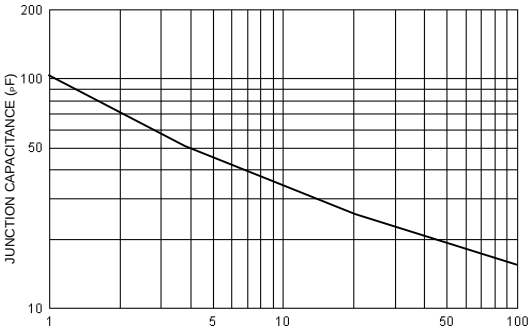
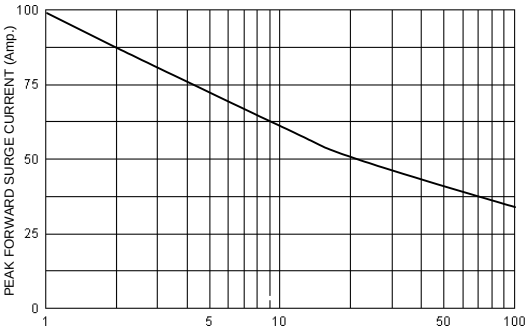
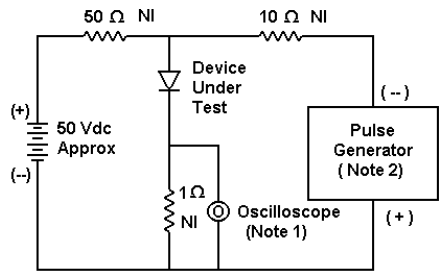
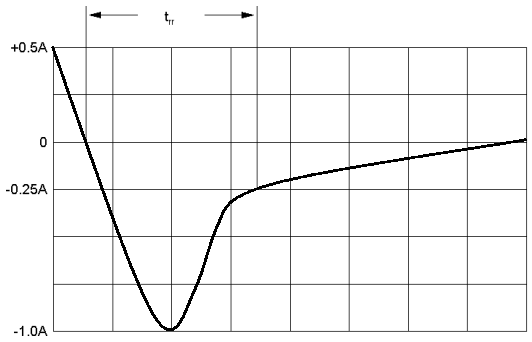


FIG-5PEAK FORWARD SURGE CURRENT





Notes:
1. Rise Time = 7 ns max. Input Impedance =1 M Ω , 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