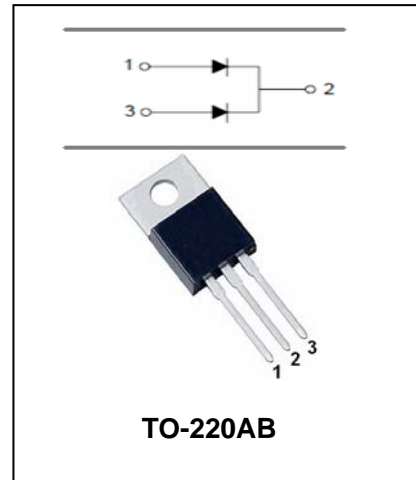


Super Fast Rectifiers

SF520CT---SF560CT

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.



MAXIMUM RATING operating temperature range applies unless otherwise specified.

Symbol	Parameter	SF 520CT	SF 530CT	SF 540CT	SF 550CT	SF 560CT	Unit
V_{RRM}	Recurrent Peak Reverse Voltage	200	300	400	500	600	V
V_{RMS}	RMS Voltage	140	210	280	350	420	V
V_{DC}	DC Blocking Voltage	200	300	400	500	600	V
$I_{(AV)}$	Average Forward Rectified Current @ $T_A=100^\circ\text{C}$	5.0					A
I_{FSM}	Peak Forward Surge Current 8.3ms Single Half-sine-wave Superimposed on Rsted Load	60					A
$T_j T_{stg}$	Operating Junction and Storage Temperature Range	-55 to +150					$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

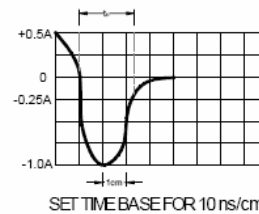
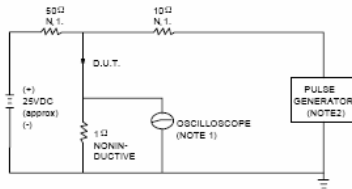
Parameter	Symbol	Test conditions	SF520CT	SF530CT-SF540CT	SF550CT-SF560CT	UNIT
			MAX			
Reverse Current	I_R	$V_R=V_{RRM}, T_A=25^\circ\text{C}$ $V_R=V_{RRM}, T_A=100^\circ\text{C}$	5.0 250	10 400		μA
Forward Voltage	V_F	$I_F=2.5\text{A}$	0.98	1.3	1.7	V
Reverse Recovery Time	t_{rr}	$I_F=0.5\text{A}, I_R=1\text{A}, I_{rr}=0.25\text{A}$	35			ns

Super Fast Rectifiers

SF520CT---SF560CT

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 = 1M Ω , 22pF.
2. RISE TIME = 10ns MAX SOURCE IMPEDANCE = 50 Ω .

FIG.2 – TYPICAL FORWARD CHARACTERISTIC

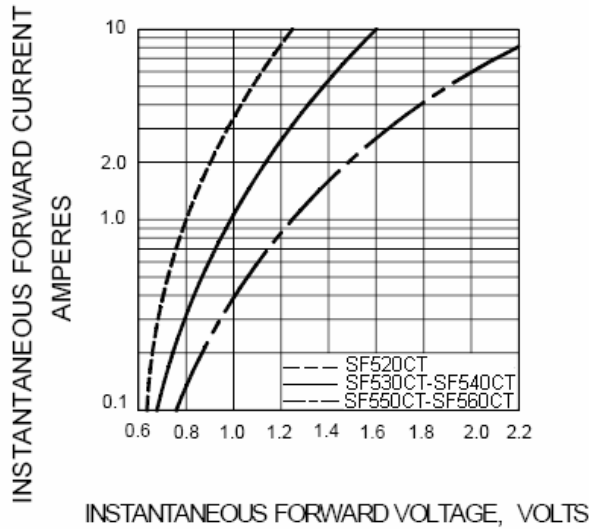


FIG.3 – PEAK FORWARD SURGE CURRENT

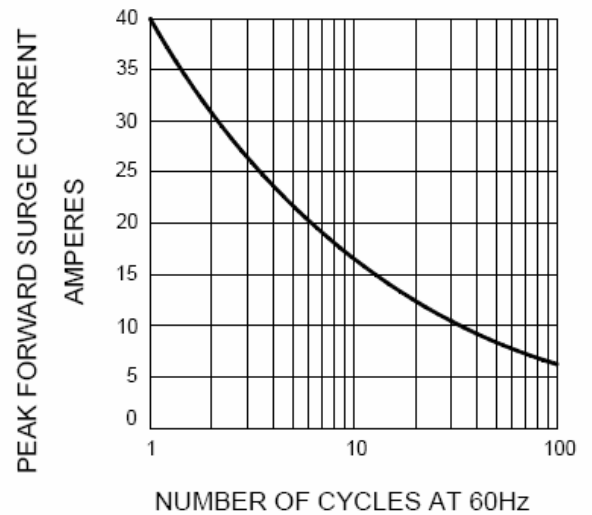
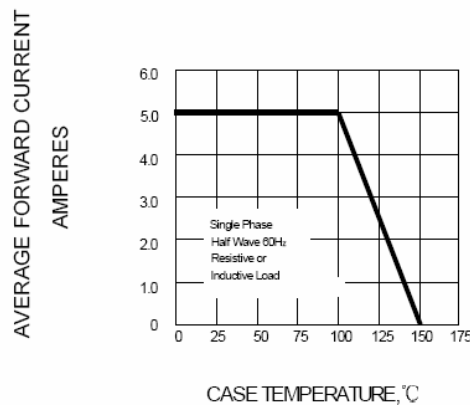


FIG.4-FORWARD DERATING CURVE





Super Fast Rectifiers

SF520CT---SF560CT

PACKAGE OUTLINE

Plastic surface mounted package

TO-220AB

