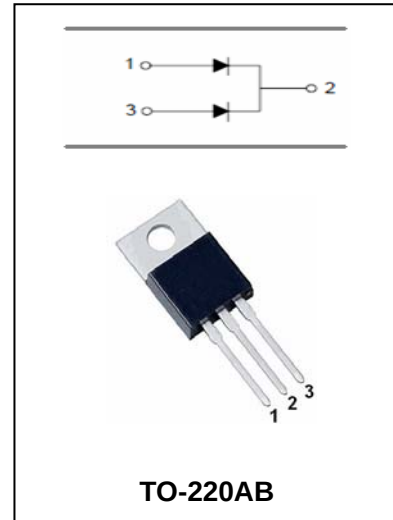


Ultra Fast Rectifiers

UF1010CT-UF1060CT

FEATURES

- Low Cost.
- Diffusde Junction.
- Glass Passivated Chip Junction.
- 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	UF 1010CT	UF 1020CT	UF 1030CT	UF 1040CT	UF 1060CT	UF 1080CT	Unit
V _{RRM}	Recurrnt Peak Reverse Voltage	100	200	300	400	600	800	V
V _{RMS}	RMS Voltage	70	140	210	280	420	560	V
V _{DC}	DC Blocking Voltage	100	200	300	400	600	800	V
I _{F(AV)}	Average Forward Rectified Current @T _C =100℃	10						A
I _{FSM}	Peak Forward Surge Current 8.3ms Single Half-Sine-wave Superimosed on Rated Load @T _J =125℃	125						A
C _J	Typical Junction Capacitance (Note1)	80				50		pF
R _{θJA}	Typical Thermal Resistance (Note2)	60						℃/W
T _J T _{stg}	Operating Junction and StorageTem-perature Range	-55 to +150						℃

Note:1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2.Thermal resirance junction to ambient.

Ultra Fast Rectifiers

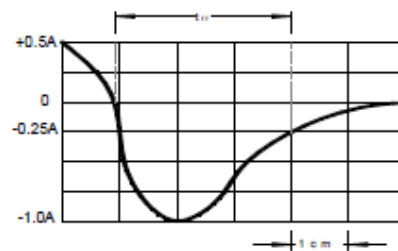
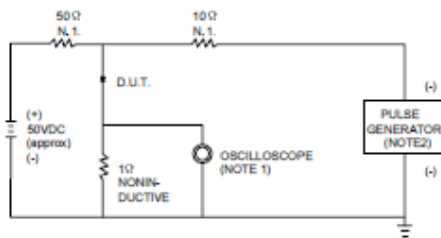
UF1010CT-UF1060CT

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

Parameter	Symbol	Test conditions	MAX			UNIT
			UF1010CT-UF1020CT	UF1030CT-UF1040CT	UF1050CT-UF1060CT	
Reverse Current	I_R	$V_R=V_{RRM}, T_A=25^\circ\text{C}$ $V_R=V_{RRM}, T_A=125^\circ\text{C}$	10 500			μA
Forward Voltage	V_F	$I_F=5\text{A}$	1.0	1.3	1.7	V
Reverse Recover Time	t_{rr}	$I_F=0.5\text{A}, I_R=1\text{A},$ $I_{rr}=0.25\text{A}$	50 100			ns

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

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



NOTES: 1. RISE TIME = 7ns MAX INPUT IMPEDANCE = $1\text{M}\Omega$.22pF.
2. RISE TIME = 10ns MAX SOURCE IMPEDANCE = 50 Ω .

SET TIME BASE FOR 10/20 ns/cm

FIG.2 -- TYPICAL FORWARD CHARACTERISTIC

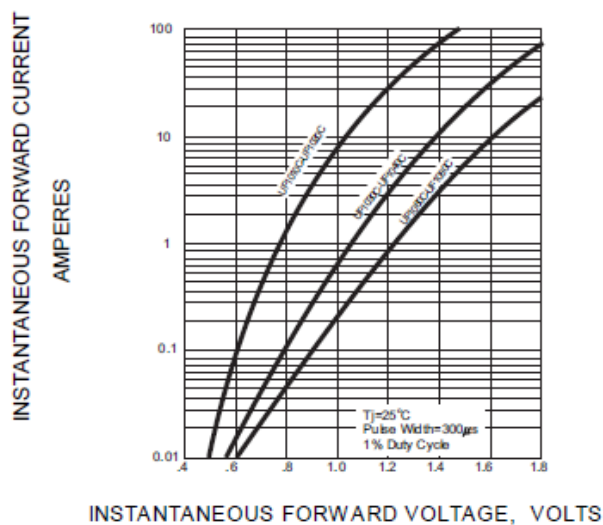
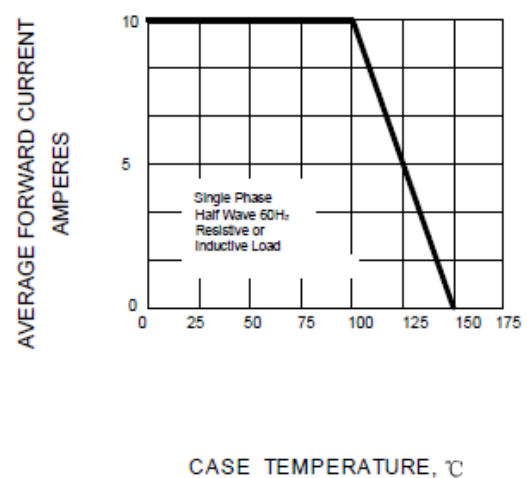


FIG.3 -- FORWARD DERATING CURVE



Ultra Fast Rectifiers

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FIG.4 -- TYPICAL JUNCTION CAPACITANCE

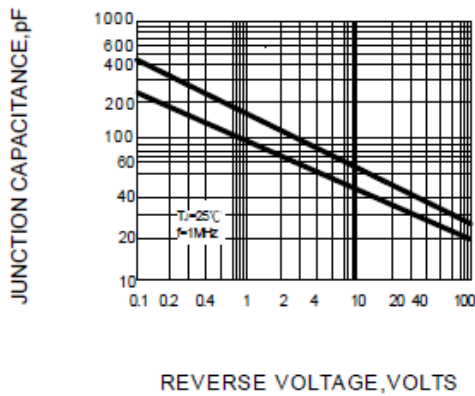
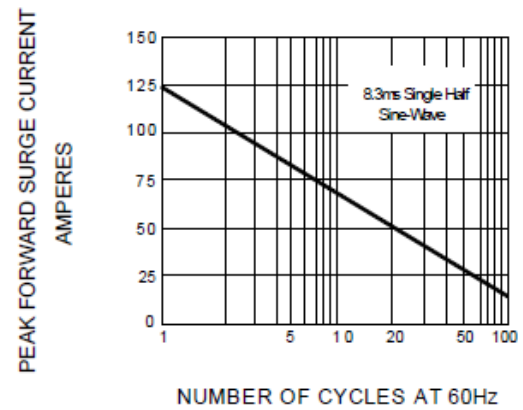


FIG.5 -- PEAK FORWARD SURGE CURRENT



PACKAGE OUTLINE

Plastic surface mounted package

TO-220AB

