

## 16.0A GLASS PASSIVATED EFFICIENCY FAST RECTIFIERS-50-600V

Dim.	Value Inch[mm]	
	Min.	Max.
A	0.139 [3.55]	---
B	0.387 [9.85]	0.419 [10.66]
C	0.226 [5.75]	0.269 [6.85]
D	0.548 [13.93]	0.624 [15.87]
E	0.50 [12.70]	---
F	---	0.177 [4.50]
G	0.095[2.41]	0.105[2.67]
H	0.019 [0.50]	0.038 [0.96]
J	0.163 [4.16]	0.196 [5.00]
K	0.045 [1.15]	0.054 [1.39]
L	---	0.025 [0.65]

### PRODUCT FEATURES

1. FLAMMABILITY CLASSIFICATION: 94V-0
2. GLASS PASSIVATED CHIP JUNCTION
3. LOW LEAKAGE
4. LOW FORWARD VOLTAGE DROP
5. HIGH SURGE CURRENT CAPABILITY
6. CASE: JEDEC TO-220AB, MOLDED PLASTIC
7. DIMENSIONS IN INCHES AND (MILLIMETERS)
8. POLARITY: AS MARKED
9. WEIGHT: 2.10 GRAMS
10. LEADS: SOLDERABILITY PER MIL-STD-202 METHOD 208
11. RoHS, SUFFIX "-H" INDICATES HALOGEN FREE PARTS

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED STORAGE AND OPERATING TEMPERATURE RANGE -55°C TO +150°C. SINGLE PHASE, HALF WAVE, 60 HZ, RESISTIVE OR INDUCTIVE LOAD. FOR CAPACITIVE LOAD, DERATE CURRENT BY 20%.

RATINGS	SYMBOL	VALUE	UNITS
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT @ 25°C	$I_O$	16	A
PEAK FWD SURGE CURRENT, 8.3ms HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	$I_{FSM}$	100	A
TYPICAL JUNCTION CAPACITANCE (NOTE2)	$C_J$	30	pF
MAXIMUM REVERSE CURRENT @ 25°C	$I_R$	5	uA
MAXIMUM REVERSE CURRENT @ 125°C	$I_R$	250	uA
MAXIMUM REVERSE RECOVERY TIME (NOTE1)	$T_{RR}$	25	nS

1. REVERSE RECOVERY TIME TEST CONDITION,  $I_F=0.5A$ ,  $I_R=1.0A$ ,  $I_{RR}=0.25A$
2. MEASURED @ 1 MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 VOLTS
3. MAXIMUM FORWARD VOLTAGE @  $I_O$
4. DUAL RECTIFIER CONSTRUCTION, POSITIVE CENTETAP, 5.0A HALF WAVE AND 10.0A FULL WAVE RECTIFICATION

PART NUMBER	MAX RECURRENT PK REV VOLTAGE $V_{RRM}$ (V)	MAX RMS VOLTAGE $V_{RMS}$ (V)	MAX DC BLOCKING VOLTAGE $V_{DC}$ (V)	MAX FWD VOLTAGE $V_F$ (V)	MARKING
EF1605CT	50	35	50	0.98	EF1605CT
EF1610CT	100	70	100	0.98	EF1610CT
EF1620CT	200	140	200	0.98	EF1620CT
EF1640CT	400	280	400	1.25	EF1640CT
EF1660CT	600	420	600	1.9	EF1660CT

## RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

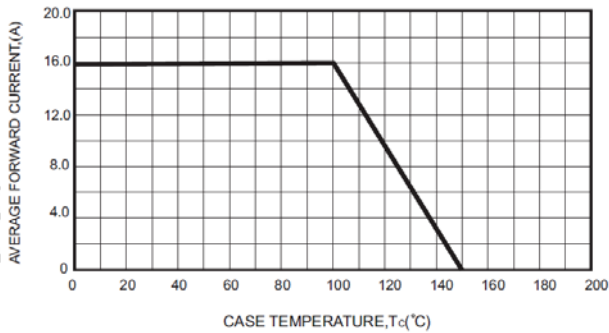


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

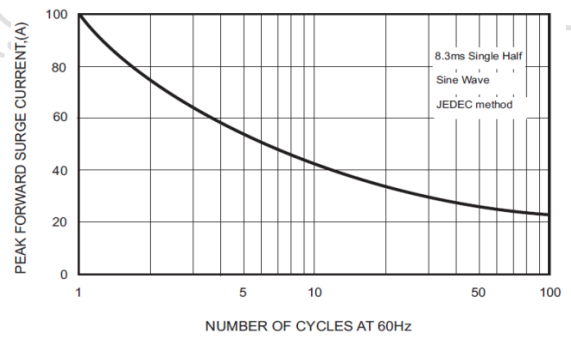


FIG.3-TYPICAL FORWARD CHARACTERISTICS

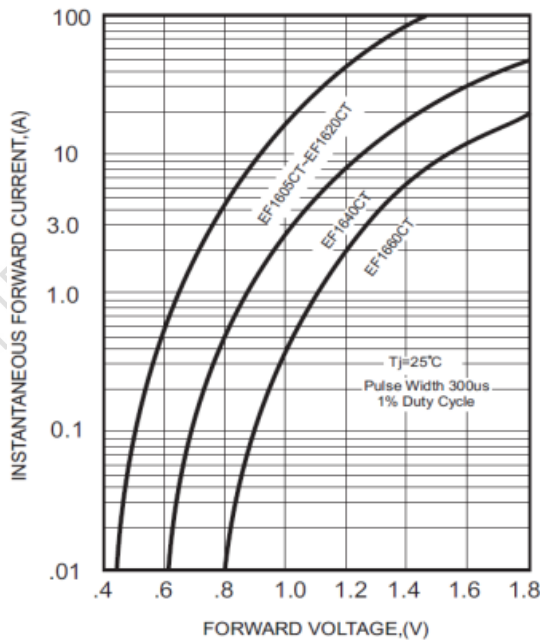


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

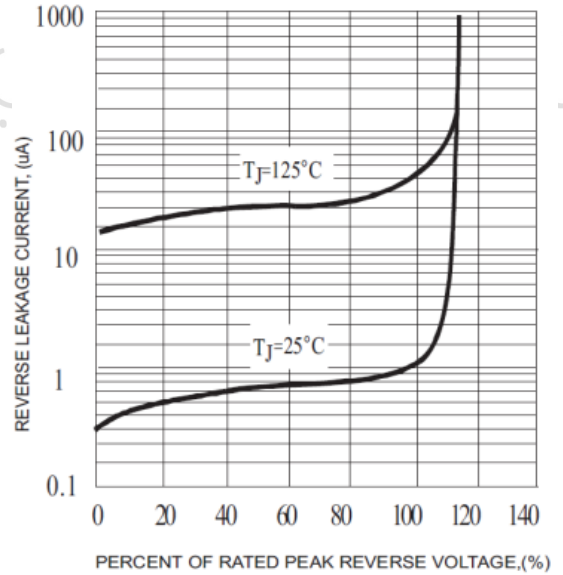
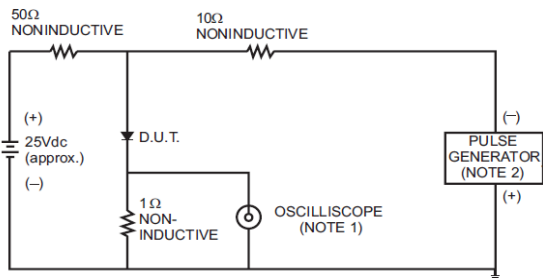
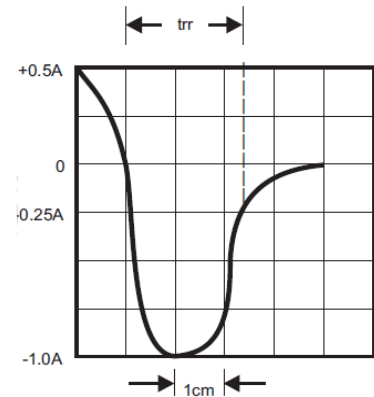


FIG.5- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm.22pF.  
2. Rise Time= 10ns max., Source Impedance= 50 ohms.



SET TIME BASE FOR  
50 / 10ns / cm