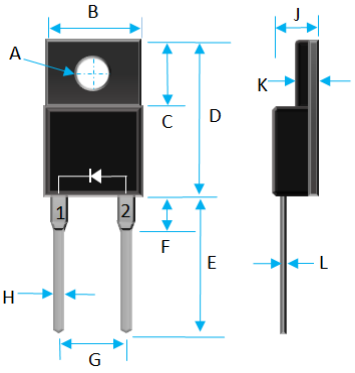
EF10A05F THRU EF10A60F SPECIFICATIONS

Rev. A

10.0A GLASS PASSIVATED EFFICIENCY FAST RECTIFIERS-50-600V



Dim.	Value Inch[mm] Min.	Max.
A	0.118 [3.0]	0.134 [3.4]
B	0.381 [9.7]	0.406[10.3]
C	0.248 [6.3]	0.272 [6.9]
D	0.583 [14.8]	0.606 [15.4]
E	0.512 [13.0]	0.548 [13.9]
F	---	0.161 [4.1]
G	0.195 [4.95]	0.204 [5.18]
H	0.011 [0.3]	0.035 [0.9]
J	0.165 [4.2]	0.189 [4.8]
K	0.099 [2.5]	0.130 [3.3]
L	---	0.032 [0.8]

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 ITO-220AC, MOLDED PLASTIC
7. DIMENSIONS IN INCHES AND (MILLIMETERS)
8. POLARITY: AS MARKED
9. WEIGHT: 1.7 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	10	A
PEAK FWD SURGE CURRENT, 8.3ms HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	I_{FSM}	100	A
TYPICAL JUNCTION CAPACITANCE (NOTE2)	C_J	60	pF
MAXIMUM REVERSE CURRENT @ 25℃	I_R	5	uA
MAXIMUM REVERSE CURRENT @ 125℃	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 0F 4.0 VOLTS
3. MAXIMUM FORWARD VOLTAGE @ I_o

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
EF10A05F	50	35	50	0.98	EF10A05F
EF10A10F	100	70	100	0.98	EF10A10F
EF10A20F	200	140	200	0.98	EF10A20F
EF10A40F	400	280	400	1.25	EF10A40F
EF10A60F	600	420	600	1.9	EF10A60F

RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

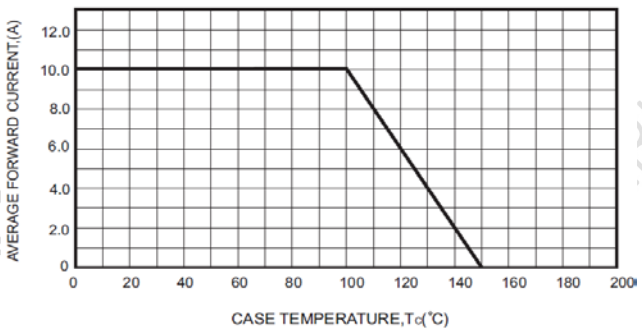


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

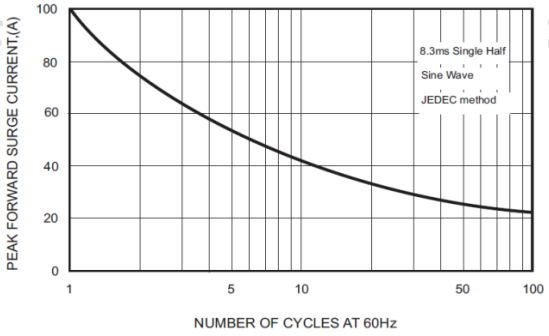


FIG.3-TYPICAL FORWARD CHARACTERISTICS

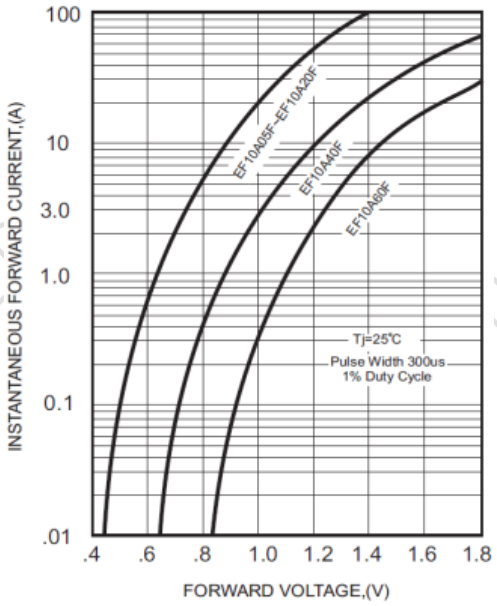


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

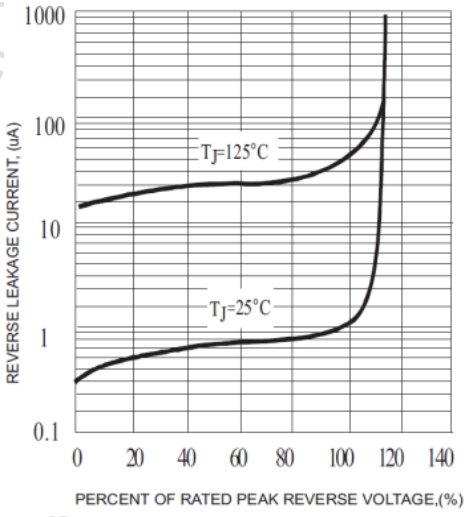
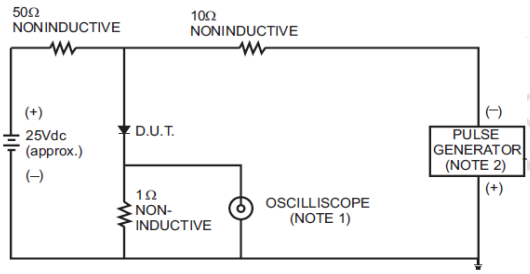
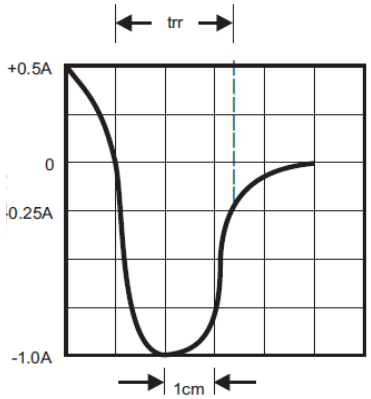


FIG.5- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



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