



EF1005FCT THRU EF1060FCT SPECIFICATIONS

Rev. A

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

	<table><thead><tr><th rowspan="2">Dim.</th><th colspan="2">Value Inch[mm]</th></tr><tr><th>Min.</th><th>Max.</th></tr></thead><tbody><tr><td>A</td><td>0.118 [3.0]</td><td>0.134 [3.4]</td></tr><tr><td>B</td><td>0.381 [9.7]</td><td>0.406 [10.3]</td></tr><tr><td>C</td><td>0.248 [6.3]</td><td>0.272 [6.9]</td></tr><tr><td>D</td><td>0.583 [14.8]</td><td>0.606 [15.4]</td></tr><tr><td>E</td><td>0.512 [13.0]</td><td>0.548 [13.9]</td></tr><tr><td>F</td><td>---</td><td>0.161 [4.1]</td></tr><tr><td>G</td><td>0.095 [2.41]</td><td>0.105 [2.67]</td></tr><tr><td>H</td><td>0.019 [0.50]</td><td>0.028 [0.7]</td></tr><tr><td>J</td><td>0.165 [4.2]</td><td>0.189 [4.8]</td></tr><tr><td>K</td><td>0.099 [2.5]</td><td>0.130 [3.3]</td></tr><tr><td>L</td><td>---</td><td>0.032 [0.8]</td></tr></tbody></table>	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	0.095 [2.41]	0.105 [2.67]	H	0.019 [0.50]	0.028 [0.7]	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-220AB, 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
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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}	80	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 CENTER TAP, 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
EF1005FCT	50	35	50	0.98	EF1005FCT
EF1010FCT	100	70	100	0.98	EF1010FCT
EF1020FCT	200	140	200	0.98	EF1020FCT
EF1040FCT	400	280	400	1.25	EF1040FCT
EF1060FCT	600	420	600	1.9	EF1060FCT



RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

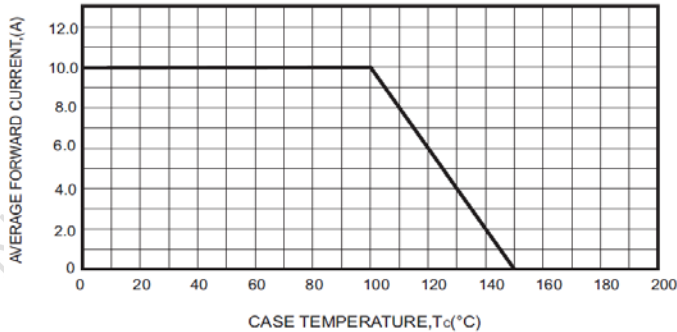


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

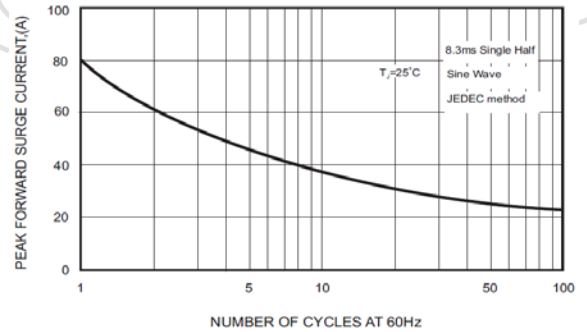


FIG.3-TYPICAL FORWARD CHARACTERISTICS

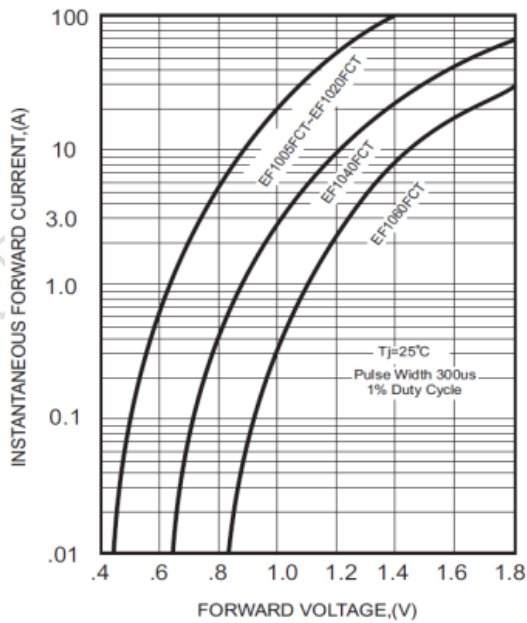


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

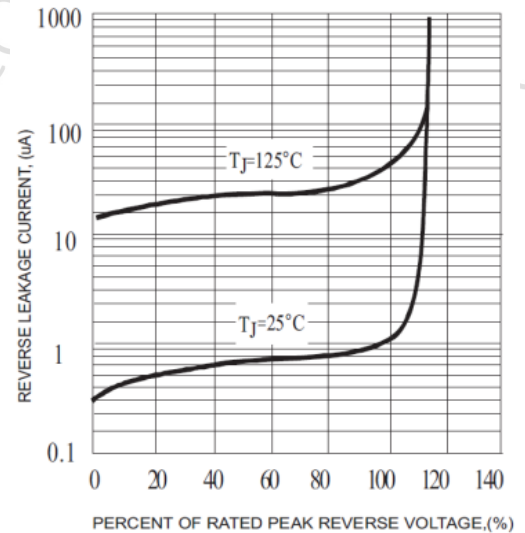
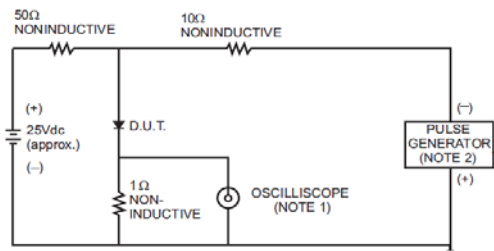


FIG.5- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



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

