



EF8A05 THRU EF8A60 SPECIFICATIONS

Rev. A

8.0A GLASS PASSIVATED EFFICIENCY FAST RECTIFIERS-50-600V

		<table><tr><th colspan="3">Value Inch[mm]</th></tr><tr><th>Dim.</th><th>Min.</th><th>Max.</th></tr><tr><td>A</td><td>0.139 [3.55]</td><td>---</td></tr><tr><td>B</td><td>0.387 [9.85]</td><td>0.419 [10.66]</td></tr><tr><td>C</td><td>0.226 [5.75]</td><td>0.269 [6.85]</td></tr><tr><td>D</td><td>0.548 [13.93]</td><td>0.624 [15.87]</td></tr><tr><td>E</td><td>0.50 [12.70]</td><td>---</td></tr><tr><td>F</td><td>---</td><td>0.177 [4.50]</td></tr><tr><td>G</td><td>0.195 [4.95]</td><td>0.204 [5.18]</td></tr><tr><td>H</td><td>0.019 [0.50]</td><td>0.038 [0.96]</td></tr><tr><td>J</td><td>0.163 [4.16]</td><td>0.196 [5.00]</td></tr><tr><td>K</td><td>0.045 [1.15]</td><td>0.054 [1.39]</td></tr><tr><td>L</td><td>---</td><td>0.025 [0.65]</td></tr></table>	Value Inch[mm]			Dim.	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	0.195 [4.95]	0.204 [5.18]	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]
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		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-220AC, MOLDED PLASTIC 7. DIMENSIONS IN INCHES AND (MILLIMETERS) 8. POLARITY: AS MARKED 9. WEIGHT: 2.05 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	8	A
PEAK FWD SURGE CURRENT, 8.3ms HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	I_{FSM}	100	A
TYPICAL JUNCTION CAPACITANCE (NOTE2)	C_J	50	pF
MAXIMUM REVERSE CURRENT @ 25°C	I_R	5	uA
MAXIMUM REVERSE CURRENT @ 125°C	I_R	200	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

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
EF8A05	50	35	50	0.98	EF8A05
EF8A10	100	70	100	0.98	EF8A10
EF8A20	200	140	200	0.98	EF8A20
EF8A40	400	280	400	1.25	EF8A40
EF8A60	600	420	600	1.9	EF8A60



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RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

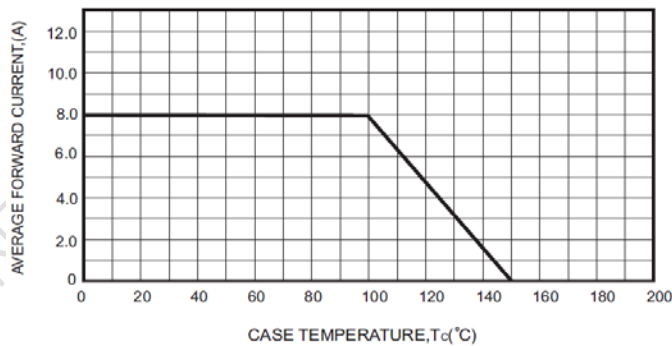


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

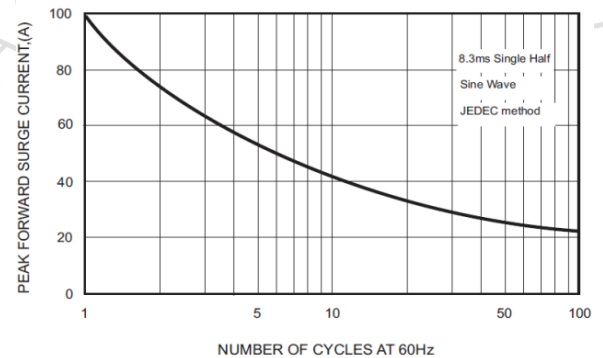


FIG.3-TYPICAL FORWARD CHARACTERISTICS

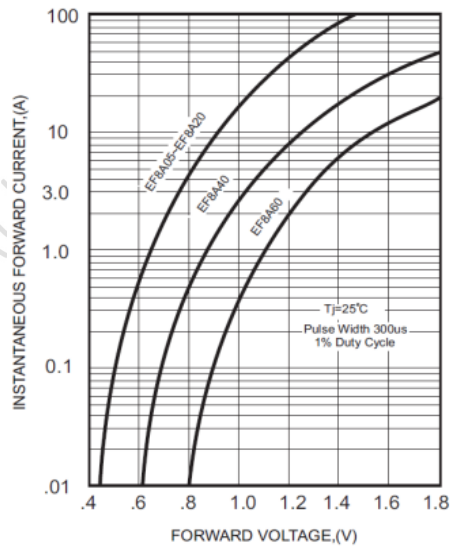


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

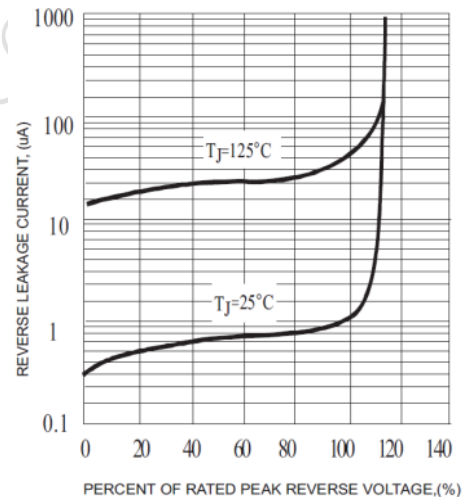
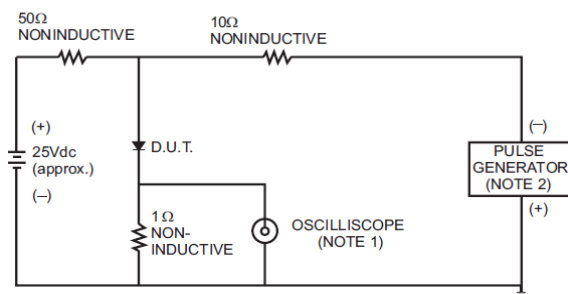


FIG.5- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



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

