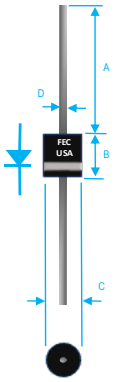
FR60-005 THRU FR60-10 SPECIFICATIONS

Rev. A

6A FAST RECOVERY PLASTIC RECTIFIER



Dim.	Value In[mm] Min.	Max.
A	1000[25.40]	---
B	0.340[8.64]	0.360[9.14]
C	0.340[8.64]	0.360[9.14]
D	0.048[122]	0.052[132]

PRODUCT FEATURES

1. FLAMMABILITY CLASSIFICATION: 94V-0
2. DIFFUSED JUNCTION
3. HIGH SURGE CURRENT CAPABILITY
4. CASE: TRANSFER MOLDED, P6
5. DIMENSIONS IN INCHES AND (MILLIMETERS)
6. POLARITY: INDICATED BY CATHODE BAND
7. WEIGHT : 2.1 GRAMS
8. TERMINALS : PER MIL-STD-202, METHOD 208
9. ROHS

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%

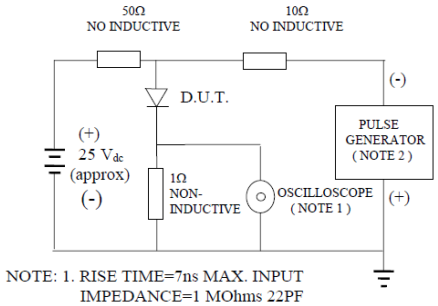
RATINGS	SYMBOL	VALUE	UNITS
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT 0.375"(9.5mm) LEAD LENGTH @ 55°C	IO	6	A
PEAK FWD SURGE CURRENT, 8.3ms HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	IFSM	300	A
TYPICAL JUNCTION CAPACITANCE(NOTE1)	CJ	100	pF
TYPICAL THERMAL RESISTANCE (NOTE 2)	Rqja	10	°C/W
MAXIMUM FORWARD VOLTAGE	VF	1.3	V
MAXIMUM REVERSE CURRENT @ 25°C	IR	10	uA
MAXIMUM REVERSE CURRENT @ 100°C	IR	100	uA

1. MEASURED @ 1.0 MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 V
2. BOTH LEADS ATTACHED TO HEAT SINK 70x70x1t(mm) COPPER PLATE @ LEAD LENGTH 5mm
3. REVERSE RECOVERY TEST CONDITIONS: IF=0.5A, IR=1.0A, IRR=0.25A
4. MAXIMUM FORWARD VOLTAGE AT Io DC

PART NUMBER	MAX RECURRENT PK REV VOLTAGE VRRM (V)	MAX RMS VOLTAGE VRMS (V)	MAX DC BLOCKING VOLTAGE VDC (V)	TYPICAL THERMAL RESISTANCE Rqjc(°C/W)	MAX REV RECOVERY TIME TRR (nS)
FR60-005	50	35	50	10	150
FR60-01	100	70	100	10	150
FR60-02	200	140	200	10	150
FR60-04	400	280	400	10	150
FR60-06	600	420	600	10	250
FR60-08	800	560	800	10	500
FR60-10	1000	700	1000	2.2	500

RATING AND CHARACTERISTIC CURVES

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



NOTE: 1. RISE TIME=7ns MAX. INPUT IMPEDANCE=1 MOhms 22PF
2. RISE TIME =10ns MAX. SOURCE IMPEDANCE=50 OHMS

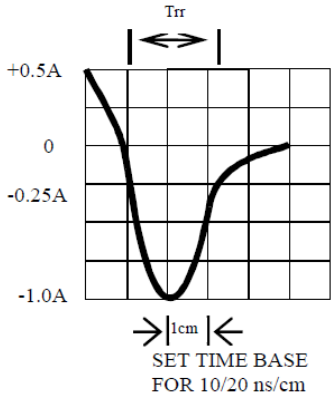


Fig. 2-MAXIMUM CURRENT DERATING CURVE

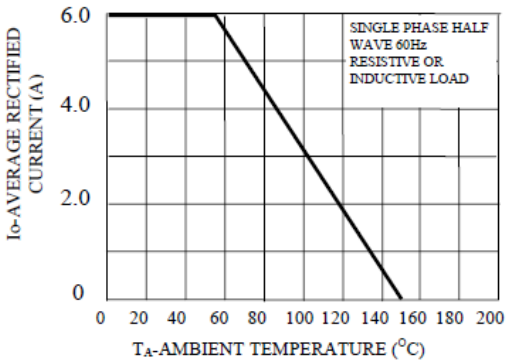


Fig. 3-MAXIMUM FORWARD SURGE NUMBER OF CYCLES

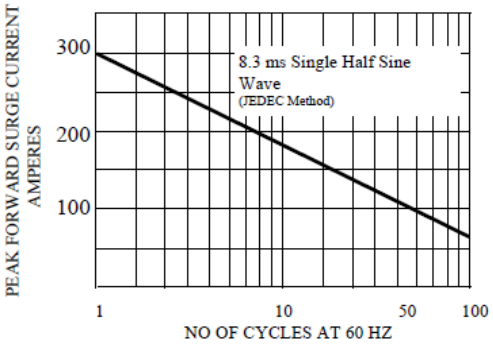


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

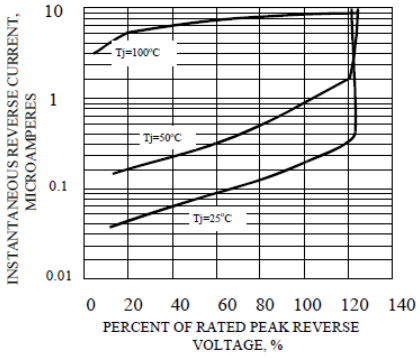


FIG. 5-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS