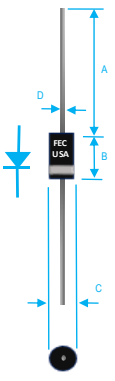


## 1A FAST RECOVERY GLASS PASSIVATED RECTIFIER



Dim.	Value In (mm)	
	Min.	Max.
A	1.000[25.40]	—
B	0.166[4.23]	0.205[5.21]
C	0.080[2.03]	1.070[27.18]
D	0.570[14.48]	0.610[15.49]

### PRODUCT FEATURES

1. FLAMMABILITY CLASSIFICATION: 94V-0
2. GLASS PASSIVATED CHIP JUNCTION
3. DIFFUSED JUNCTION
4. HIGH SURGE CURRENT CAPABILITY
5. CASE: TRANSFER MOLDED A-405
6. DIMENSIONS IN INCHES AND (MILLIMETERS)
7. POLARITY: INDICATED BY CATHODE BAND
8. WEIGHT : 0.2 GRAMS
9. TERMINALS : PER MIL-STD-202, METHOD 208
10. 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	1	A
PEAK FWD SURGE CURRENT, 8.3ms HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	IFSM	30	A
TYPICAL JUNCTION CAPACITANCE(NOTE 1)	CJ	15	pF
TYPICAL THERMAL RESISTANCE (NOTE 2)	Rqja	50	°C/W
MAXIMUM FORWARD VOLTAGE	VF	1.3	V
MAXIMUM REVERSE CURRENT @ 25°C	IR	5	uA
MAXIMUM REVERSE CURRENT @ 100°C	IR	50	uA

1. MEASURED @ 1.0 MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 V
2. BOTH LEADS ATTACHED TO HEAT SINK 20x20x1t(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)	MAX REV RECOVERY TIME TRR (nS)
FR10-005SG	50	35	50	150
FR10-01SG	100	70	100	150
FR10-02SG	200	140	200	150
FR10-04SG	400	280	400	150
FR10-06SG	600	420	600	250
FR10-08SG	800	560	800	500
FR10-10SG	1000	700	1000	500

## RATING AND CHARACTERISTIC CURVES

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

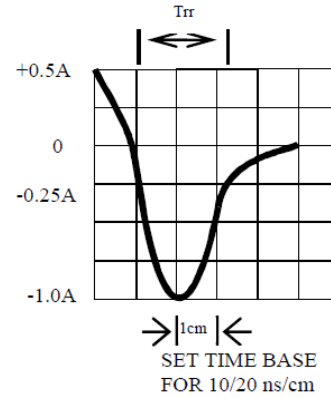
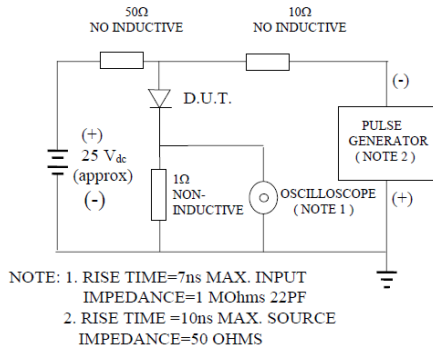


Fig. 2-MAXIMUM FORWARD CURRENT DERATING CURVE

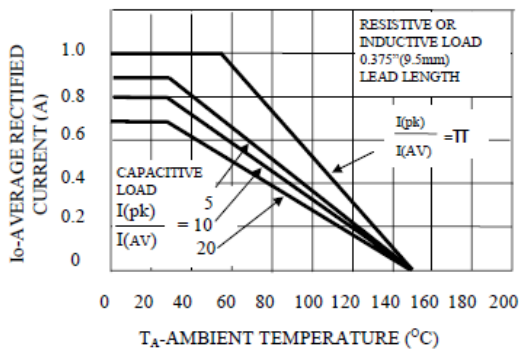


FIG. 3-TYPICAL JUNCTION CAPACITANCE

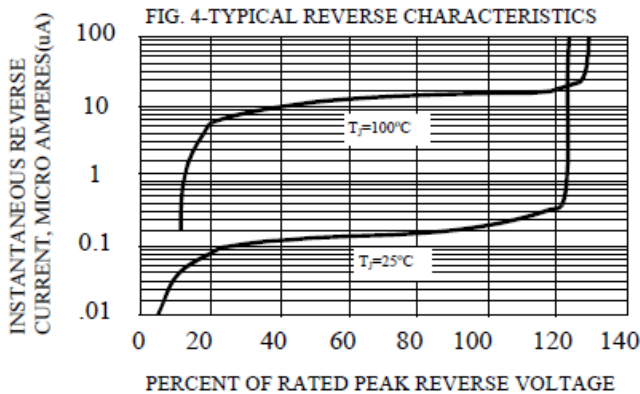
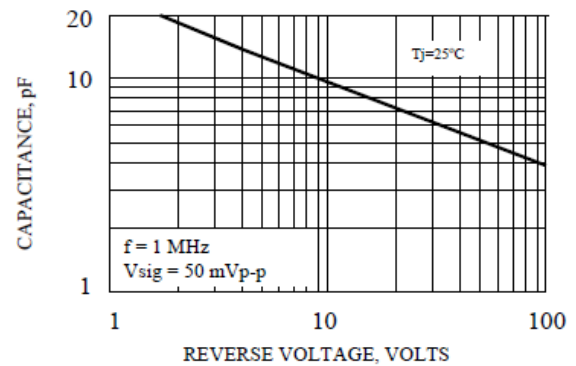
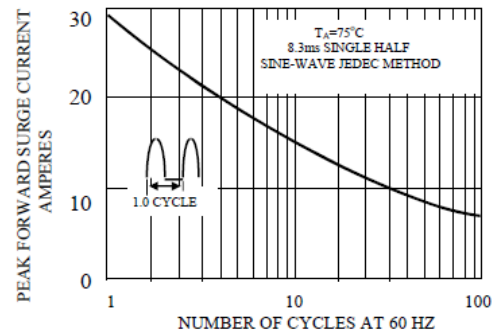


Fig. 5-MAXIMUM FORWARD SURGE CURRENT





# FR10-005SG THRU FR10-10SG SPECIFICATIONS

Rev. A

