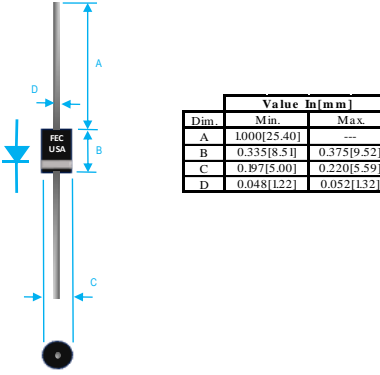


## 3A FAST RECOVERY PLASTIC RECTIFIER

 <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th rowspan="2">Dim.</th> <th colspan="2">Value In (mm)</th> </tr> <tr> <th>Min.</th> <th>Max.</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>1.000[25.40]</td> <td>—</td> </tr> <tr> <td>B</td> <td>0.335[8.51]</td> <td>0.375[9.52]</td> </tr> <tr> <td>C</td> <td>0.197[5.00]</td> <td>0.220[5.59]</td> </tr> <tr> <td>D</td> <td>0.048[1.22]</td> <td>0.052[1.32]</td> </tr> </tbody> </table>	Dim.	Value In (mm)		Min.	Max.	A	1.000[25.40]	—	B	0.335[8.51]	0.375[9.52]	C	0.197[5.00]	0.220[5.59]	D	0.048[1.22]	0.052[1.32]	<b>PRODUCT FEATURES</b> <ol style="list-style-type: none"> <li>1. FLAMMABILITY CLASSIFICATION: 94V-0</li> <li>2. DIFFUSED JUNCTION</li> <li>3. HIGH SURGE CURRENT CAPABILITY</li> <li>4. CASE: TRANSFER MOLDED, DO201AD</li> <li>5. DIMENSIONS IN INCHES AND (MILLIMETERS)</li> <li>6. POLARITY: INDICATED BY CATHODE BAND</li> <li>7. WEIGHT : 1.2 GRAMS</li> <li>8. TERMINALS : PER MIL-STD-202, METHOD 208</li> <li>9. ROHS</li> </ol>
Dim.		Value In (mm)																
	Min.	Max.																
A	1.000[25.40]	—																
B	0.335[8.51]	0.375[9.52]																
C	0.197[5.00]	0.220[5.59]																
D	0.048[1.22]	0.052[1.32]																

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	3	A
PEAK FWD SURGE CURRENT, 8.3ms HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	IFSM	150	A
TYPICAL JUNCTION CAPACITANCE(NOTE 1)	CJ	28	pF
TYPICAL THERMAL RESISTANCE (NOTE 2)	Rqja	20	°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 63.5x63.5x1t(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)
FR30-005	50	35	50	150
FR30-01	100	70	100	150
FR30-02	200	140	200	150
FR30-04	400	280	400	150
FR30-06	600	420	600	250
FR30-08	800	560	800	500
FR30-10	1000	700	1000	500

## RATING AND CHARACTERISTIC CURVES

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

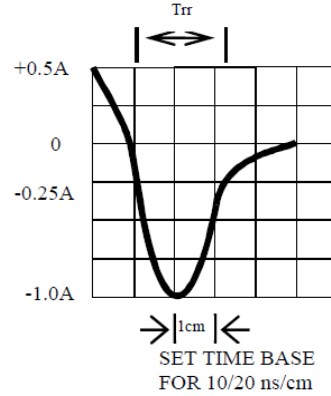
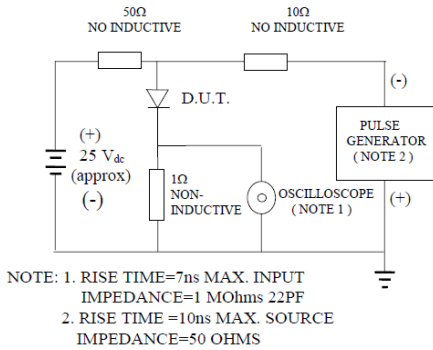


Fig. 2-MAXIMUM CURRENT DERATING CURVE

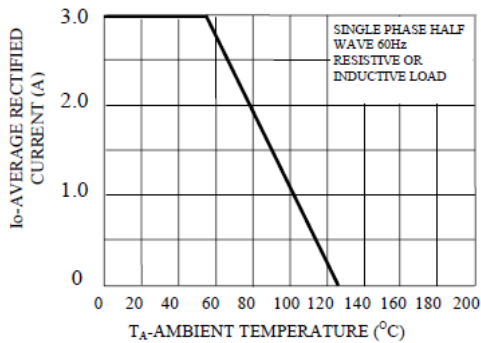


Fig. 3-MAXIMUM FORWARD SURGE NUMBER OF CYCLES

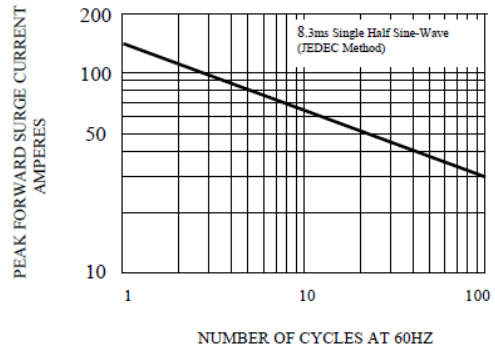


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

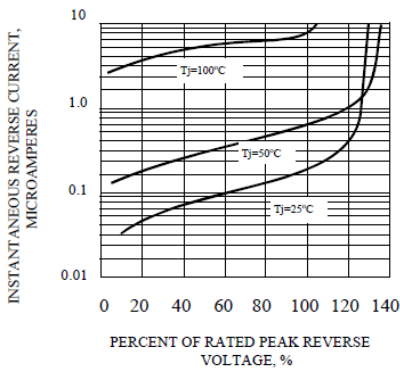


FIG. 5-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

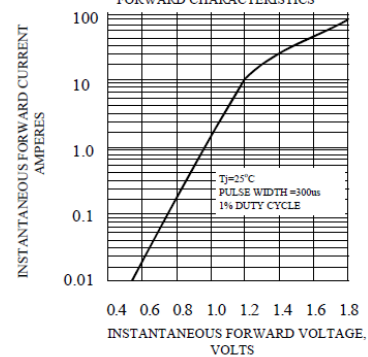
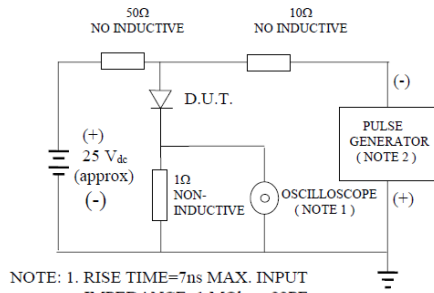


FIG. 1-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



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