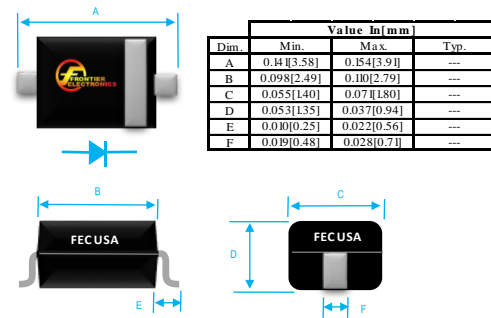


1A SURFACE MOUNT ULTRA FAST RECOVERY RECTIFIERS

 <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse; text-align: center;"> <thead> <tr> <th rowspan="2">Dim</th> <th colspan="2">Value In [mm]</th> <th rowspan="2">Typ.</th> </tr> <tr> <th>Min</th> <th>Max</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>0.14 [3.58]</td> <td>0.154 [3.91]</td> <td>---</td> </tr> <tr> <td>B</td> <td>0.098 [2.49]</td> <td>0.10 [2.79]</td> <td>---</td> </tr> <tr> <td>C</td> <td>0.055 [1.40]</td> <td>0.07 [1.80]</td> <td>---</td> </tr> <tr> <td>D</td> <td>0.053 [1.35]</td> <td>0.037 [0.94]</td> <td>---</td> </tr> <tr> <td>E</td> <td>0.010 [0.25]</td> <td>0.023 [0.56]</td> <td>---</td> </tr> <tr> <td>F</td> <td>0.019 [0.48]</td> <td>0.028 [0.71]</td> <td>---</td> </tr> </tbody> </table>	Dim	Value In [mm]		Typ.	Min	Max	A	0.14 [3.58]	0.154 [3.91]	---	B	0.098 [2.49]	0.10 [2.79]	---	C	0.055 [1.40]	0.07 [1.80]	---	D	0.053 [1.35]	0.037 [0.94]	---	E	0.010 [0.25]	0.023 [0.56]	---	F	0.019 [0.48]	0.028 [0.71]	---	<p>PRODUCT FEATURES</p> <ol style="list-style-type: none"> 1. FLAMMABILITY CLASSIFICATION: 94V-0 2. GLASS PASSIVATED CHIP JUNCTION 3. HIGH SURGE CURRENT CAPABILITY 4. BUILT-IN STRAIN RELIEF 5. LOW PROFILE 6. ULTRA FAST SWITCHING 7. CASE: MOLDED PLASTIC, SOD-123 8. POLARITY: INDICATED BY CATHODE BAND 9. WEIGHT : 0.04 GRAMS 10. ROHS
Dim		Value In [mm]			Typ.																										
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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 @ 90°C	IO	1	A
PEAK FWD SURGE CURRENT, 8.3ms HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	IFSM	30	A
TYPICAL THERMAL RESISTANCE (NOTE 2)	Rqja	30	°C/W
MAXIMUM REVERSE CURRENT @ 25°C	IR	10	uA

1. Cj MEASURED @ 1 MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 VOLTS
2. THERMAL RESISTANCE FROM JUNCTION TO TERMINAL 5.0mm2 (.013 mm THICK) LAND AREAS
3. REVERSE RECOVERY TEST CONDITIONS: IF=0.5A, IR=1.0A, IRR=0.25A
4. MAXIMUM FORWARD VOLTAGE @ 1A AND 25°C

PART NUMBER	MAX RECURRENT PK REV VOLTAGE VRRM (V)	MAX RMS VOLTAGE VRMS (V)	MAX DC BLOCKING VOLTAGE VDC (V)	MAX FWD VOLTAGE VF (V)	TYPICAL JUNCTION CAP CJ (PF)	MAX REVERSE RECOVERY TIME nS
HFM101M	50	35	50	1	20	50
HFM102M	100	70	100	1	20	50
HFM103M	200	140	200	1	20	50
HFM104M	400	280	400	1.3	20	50
HFM105M	600	420	600	1.3	15	75
HFM106M	800	560	800	1.7	15	75
HFM107M	1000	700	1000	1.7	15	75

RATING AND CHARACTERISTIC CURVES

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

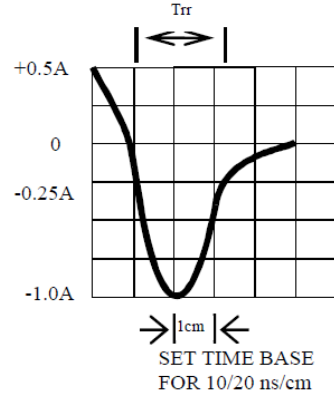
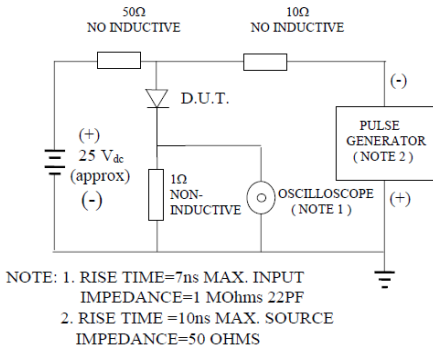


FIG. 2-TYPICAL FORWARD CURRENT DERATING CURVE

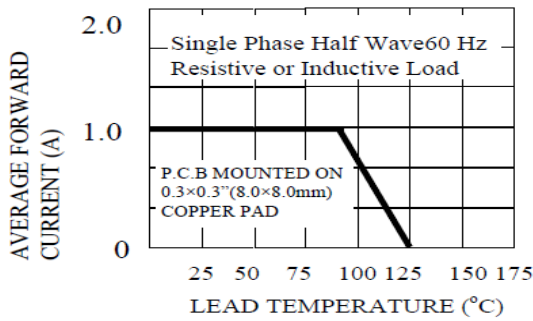


FIG. 3-TYPICAL REVERSE CHARACTERISTICS

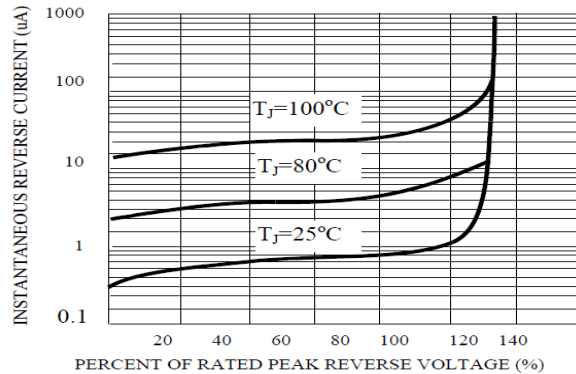


FIG. 4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

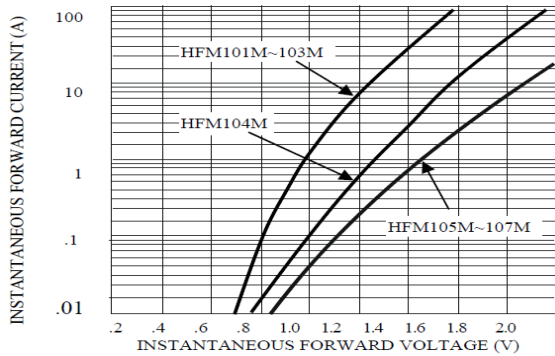
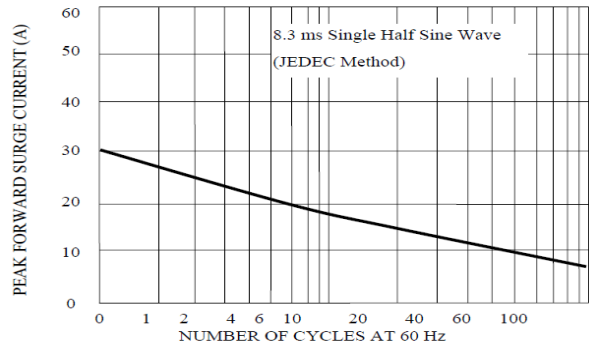


FIG. 5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT





HFM101M THRU HFM107M SPECIFICATIONS

Rev. A

FIG. 6-TYPICAL JUNCTION CAPACITANCE

