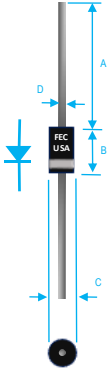


1A ULTRA FAST RECOVERY RECTIFIER



Dim.	Value in [mm]	
	Min.	Max.
A	1.000[25.40]	—
B	0.166[4.22]	0.205[5.21]
C	0.080[2.03]	0.107[2.72]
D	0.028[0.71]	0.034[0.86]

PRODUCT FEATURES

1. FLAMMABILITY CLASSIFICATION: 94V-0
2. LOW FORWARD VOLTAGE DROP
3. HIGH SURGE CURRENT CAPABILITY
4. ULTRA FAST SWITCHING
5. CASE: TRANSFER MOLDED D0-41
6. POLARITY: INDICATED BY CATHODE BAND
7. WEIGHT : 0.34 GRAMS
8. TERMINALS : PER MIL-STD-202, METHOD 208
9. PULLING TEST: 2.3 KG
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 @ TA=50°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	50	°C/W
MAXIMUM REVERSE CURRENT @ 25°C	IR	5	uA
MAXIMUM REVERSE CURRENT @ 100°C	IR	50	uA

1. Cj MEASURED @ 1 MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 VOLTS
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 @ Io DC

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
HER101	50	35	50	1.3	20	50
HER102	100	70	100	1.3	20	50
HER103	200	140	200	1.3	20	50
HER104	300	210	300	1.3	20	50
HER105	400	280	400	1.3	20	50
HER106	600	420	600	1.85	15	75
HER107	800	560	800	1.85	15	75
HER108	1000	700	1000	1.85	15	75

RATING AND CHARACTERISTIC CURVES

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

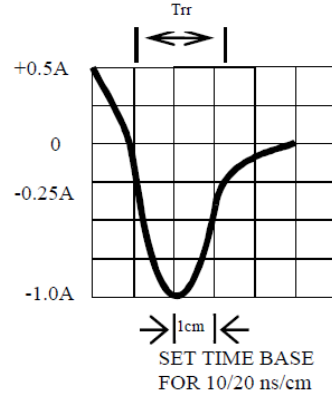
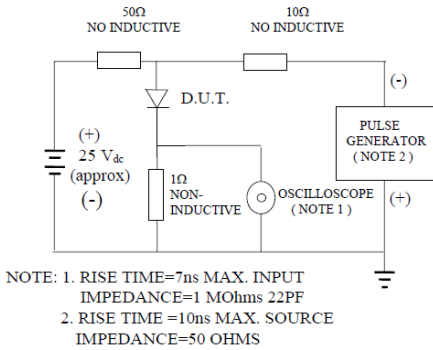


FIG. 2-TYPICAL FORWARD CURRENT DERATING CURVE

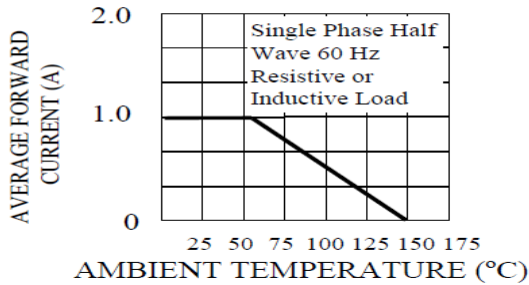


FIG. 3-TYPICAL REVERSE CHARACTERISTICS

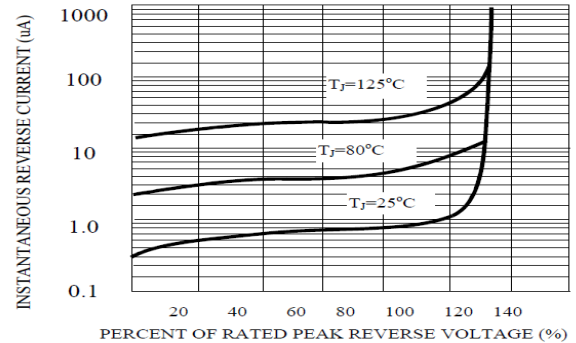


FIG. 4-TYPICAL INSTANTANEOUS

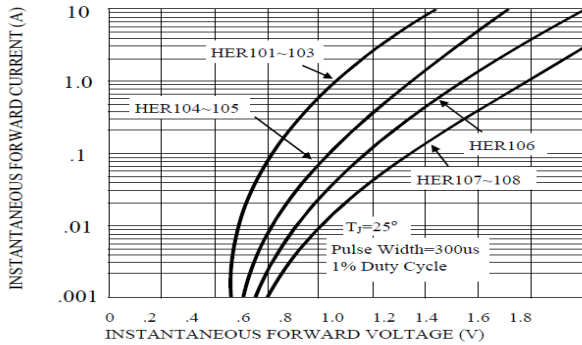
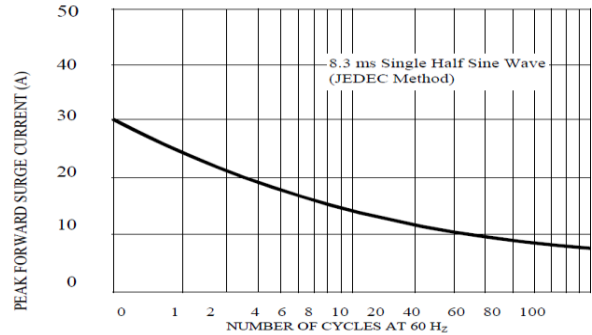


FIG. 5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT





HER101 THRU HER108 SPECIFICATIONS

Rev. A

