



Frontier Electronics Corp.

667 E. COCHRAN STREET, SIMI VALLEY, CA 93065

TEL: (805) 522-9998 FAX: (805) 522-9989

E-mail: frontiersales@frontierusa.com

Web: <http://www.frontierusa.com>

2A ULTRA FAST RECOVERY RECTIFIER

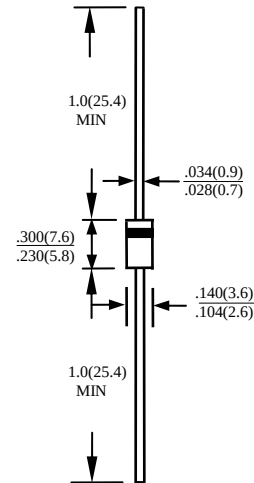
HER201 THRU HER208

FEATURES

- PLASTIC PACKAGE HAS UNDERWRITERS LABORATORY FLAMMABILITY CLASSIFICATION 94V-0
- ULTRA FAST RECOVERY TIMES FOR HIGH EFFICIENCY
- LOW FORWARD VOLTAGE, HIGH CURRENT CAPABILITY
- LOW LEAKAGE
- HIGH SURGE CAPABILITY
- HIGH TEMPERATURE SOLDERING GUARANTEED:
260°C 0.375" (9.5mm) LEAD LENGTHS FOR 10 SECONDS AT
5 LBS.(2.3KG) TENSION

MECHANICAL DATA

- CASE: MOLDED PLASTIC, DO15, DIMENSIONS
IN INCHES AND (MILLIMETERS)
- TERMINALS: AXIAL LEADS SOLDERABLE PER MIL-STD-202, METHOD 208
- POLARITY: COLOR BAND DENOTES CATHODE END
- MOUNTING POSITION: ANY
- WEIGHT: 0.4 GRAMS



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED
SINGLE PHASE, HALF WAVE, 60 HZ, RESISTIVE OR INDUCTIVE LOAD. FOR CAPACITIVE LOAD, DERATE CURRENT BY 20%

RATINGS	SYMBOL	HER201	HER202	HER203	HER204	HER205	HER206	HER207	HER208	UNITS
MAXIMUM RECURRENT PEAK REVERSE VOLTAGE	V _{RRM}	50	100	200	300	400	600	800	1000	V
MAXIMUM RMS VOLTAGE	V _{RMS}	35	70	140	210	280	420	560	700	V
MAXIMUM DC BLOCKING VOLTAGE	V _{DC}	50	100	200	300	400	600	800	1000	V
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT 0.375" (9.5mm) LEAD LENGTH AT TA=55°C	I _O	2.0								A
PEAK FORWARD SURGE CURRENT 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	I _{FSM}	60								A
TYPICAL JUNCTION CAPACITANCE (NOTE 1)	C _J	30					20			PF
TYPICAL THERMAL RESISTANCE (NOTE 2)	R _{θja}	25								°C/W
STORAGE TEMPERATURE RANGE	T _{STG}	-55 TO + 150								°C
OPERATING TEMPERATURE RANGE	T _{OP}	-55 TO + 150								°C

ELECTRICAL CHARACTERISTICS (AT $T_A=25^{\circ}C$ UNLESS OTHERWISE NOTED)

CHARACTERISTICS	SYMBOL	HER201	HER202	HER203	HER204	HER205	HER206	HER207	HER208	UNITS
MAXIMUM FORWARD VOLTAGE AT I _O DC	V _F	1.3					1.85			V
MAXIMUM REVERSE CURRENT AT TA=25°	I _R	10								μA
MAXIMUM REVERSE CURRENT AT TA=100°	I _R	100								μA
MAXIMUM REVERSE RECOVERY TIME (NOTE 3)	T _{RR}	50					75			nS

NOTE: 1. MEASURED AT 1 MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 VOLTS

2. BOTH LEADS ATTACHED TO HEAT SINK 35×35×1t(mm) COPPER PLATE AT LEAD LENGTH 5mm

3. REVERSE RECOVERY TEST CONDITIONS: $I_F=0.5A$, $I_R=1.0A$, $I_{RR}=0.25A$

RATINGS AND CHARACTERISTIC CURVE HER201 THRU HER208

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

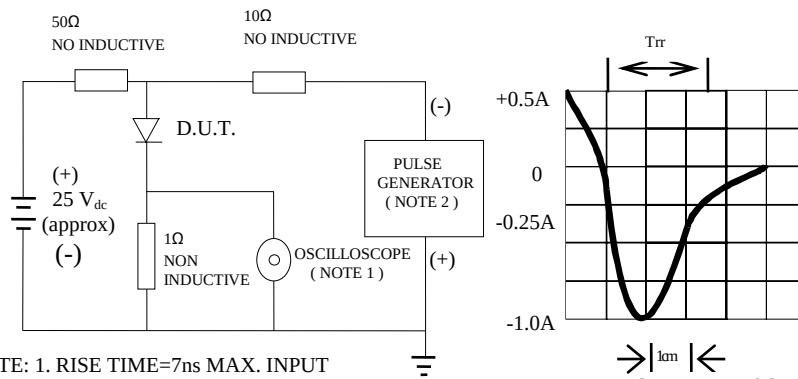


FIG. 2-TYPICAL FORWARD CURRENT DERATING CURVE

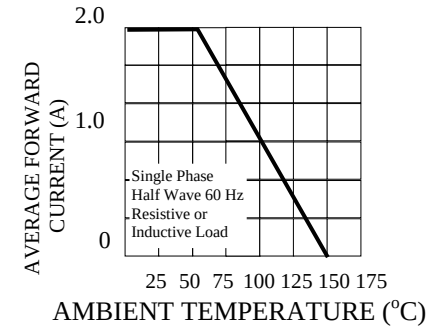


FIG. 3-TYPICAL REVERSE CHARACTERISTICS

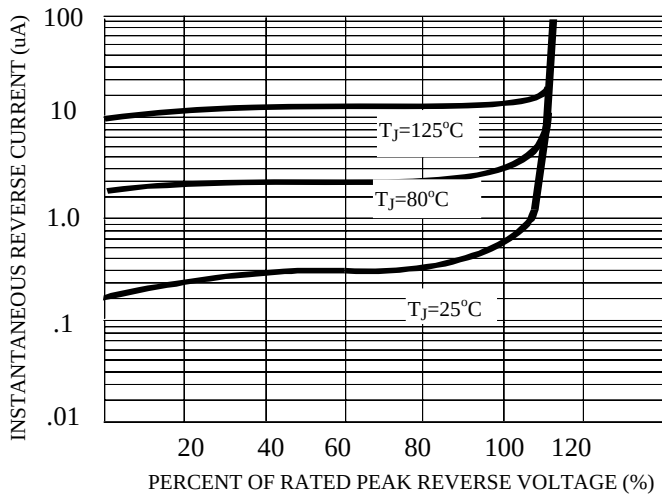


FIG. 4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

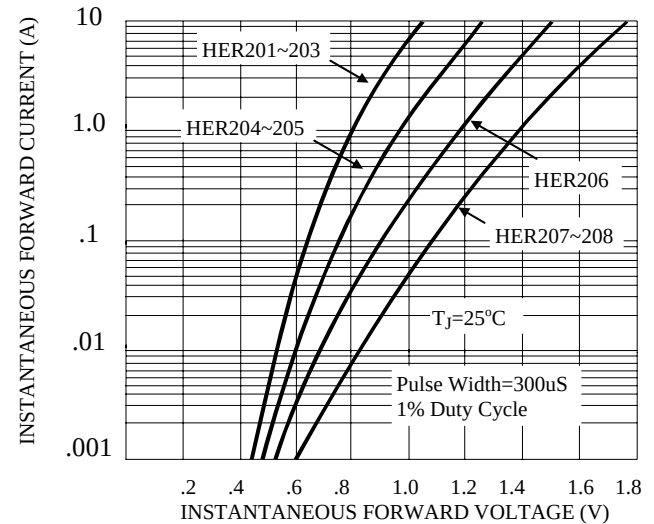


FIG. 5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

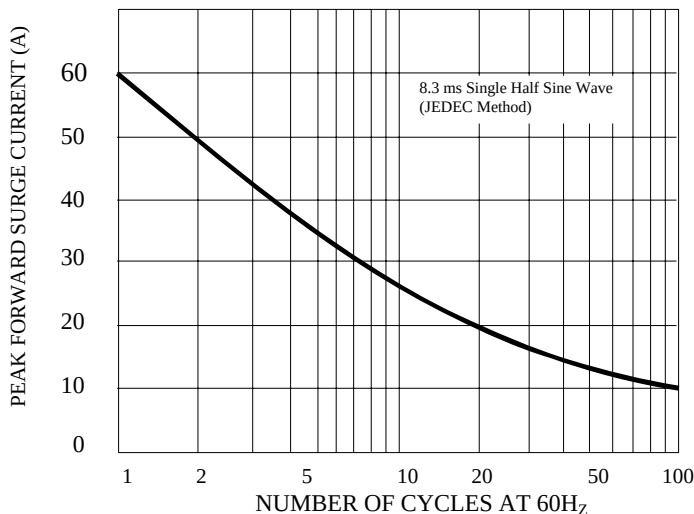


FIG. 6-TYPICAL JUNCTION CAPACITANCE

