

HIGH EFFICIENCY RECTIFIER
VOLTAGE RANGE 50 to 1000 Volts CURRENT 2.0 Amperes

FEATURES

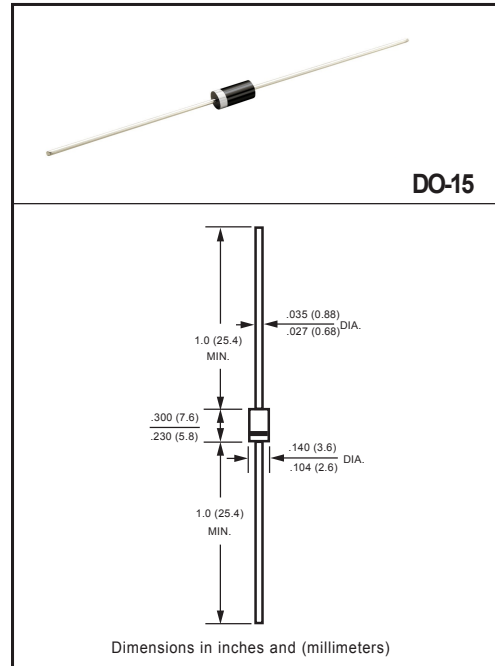
- * Low power loss,high efficiency
- * Low leakage
- * Low forward voltage drop
- * High current capability
- * High speed switching
- * High reliability
- * High current surge

MECHANICAL DATA

- * Epoxy: Device has UL flammability classification 94V-O
- * Case: Molded plastic
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 0.4 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
resistive or inductive load.



MAXIMUM RATINGS (@ TA=25 °C unless otherwise noted)

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	Volts
Maximum RMS Voltage	V _{RMS}	35	70	140	210	280	420	560	700	Volts
Maximum DC Blocking Voltage	V _{DC}	50	100	200	300	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at T _A = 50°C	I _O	2.0								Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	60								Amps
Typical Current Squared Time	I ² T	14.9								A ² S
Typical Thermal Resistance (Note 1)	R _{θJL}	10								°C/W
Typical Thermal Resistance (Note 1)	R _{θJC}	15								°C/W
Typical Thermal Resistance (Note 1)	R _{θJA}	40								°C/W
Typical Junction Capacitance (Note 2)	C _J	30				20				pF
Operating Temperature Range	T _J	150								°C
Storage Temperature Range	T _{STG}	-55 to + 150								°C

ELECTRICAL CHARACTERISTICS(@TA=25 °C unless otherwise noted)

CHARACTERISTICS	SYMBOL	HER201	HER202	HER203	HER204	HER205	HER206	HER207	HER208	UNITS
Maximum Instantaneous Forward Voltage at 2.0A DC	V _F	1.0		1.3		1.66				Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	I _R	@T _A = 25°C				0.5				μA
		@T _A = 100°C				65				μA
Maximum Reverse Recovery Time (Note 4)	t _{rr}	50				75				nSec

- NOTES : 1. Thermal Resistance : At 9.5mm lead length,PCB mounted.
 2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
 3. "ROHS compliant"
 4. Test Conditions: I_F= 0.5A, I_R= -1.0A, I_{RR}= -0.25A.
 5. Available in Halogen-free epoxy by adding suffix -HF after the part nbr.

RATING AND CHARACTERISTICS CURVES (HER201 THRU HER208)

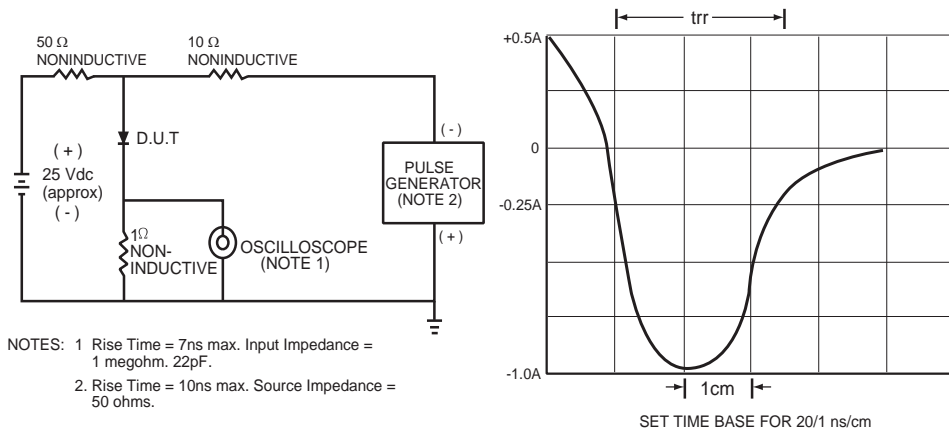


FIG.1 TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC

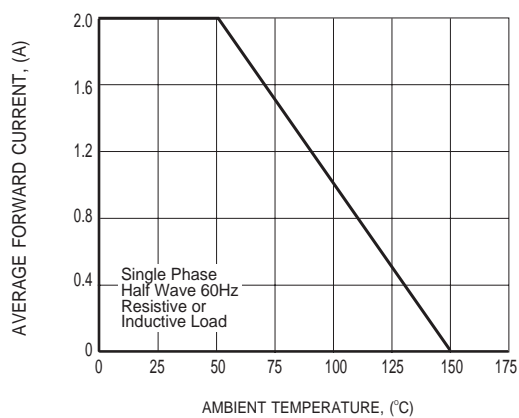


FIG.2 TYPICAL FORWARD CURRENT DERATING CURVE

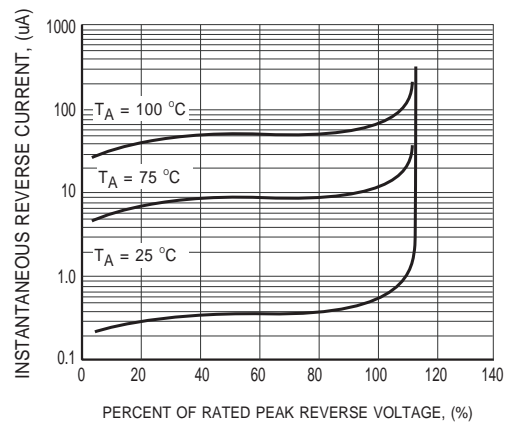


FIG.3 MAXIMUM REVERSE CHARACTERISTICS

RATING AND CHARACTERISTICS CURVES (HER201 THRU HER208)

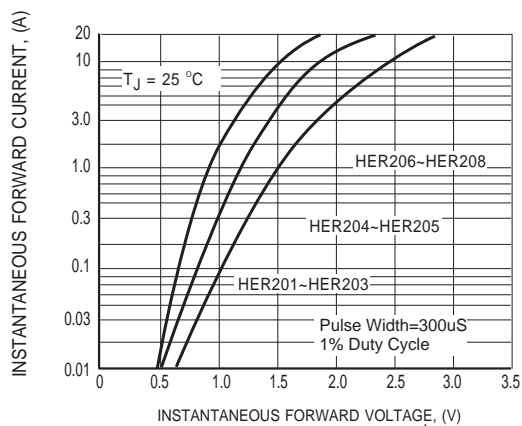


FIG.4 MAXIMUM INSTANTANEOUS FORWARD CHARACTERISTICS

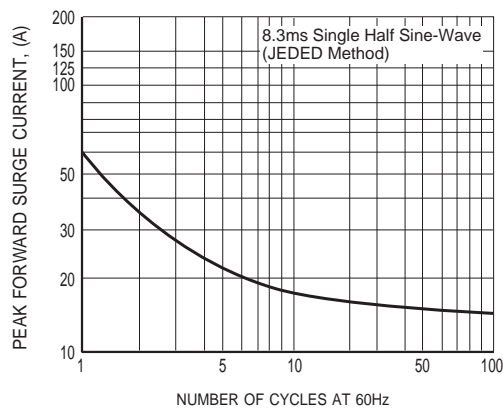


FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

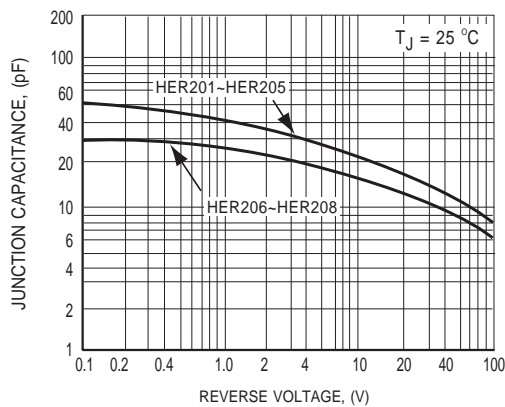
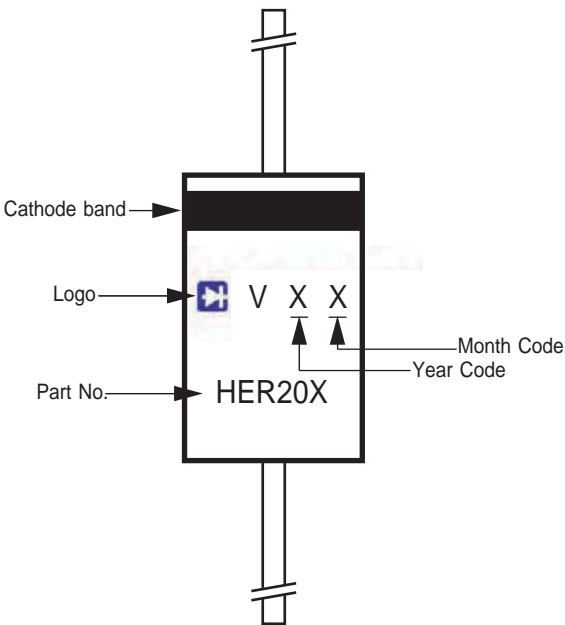


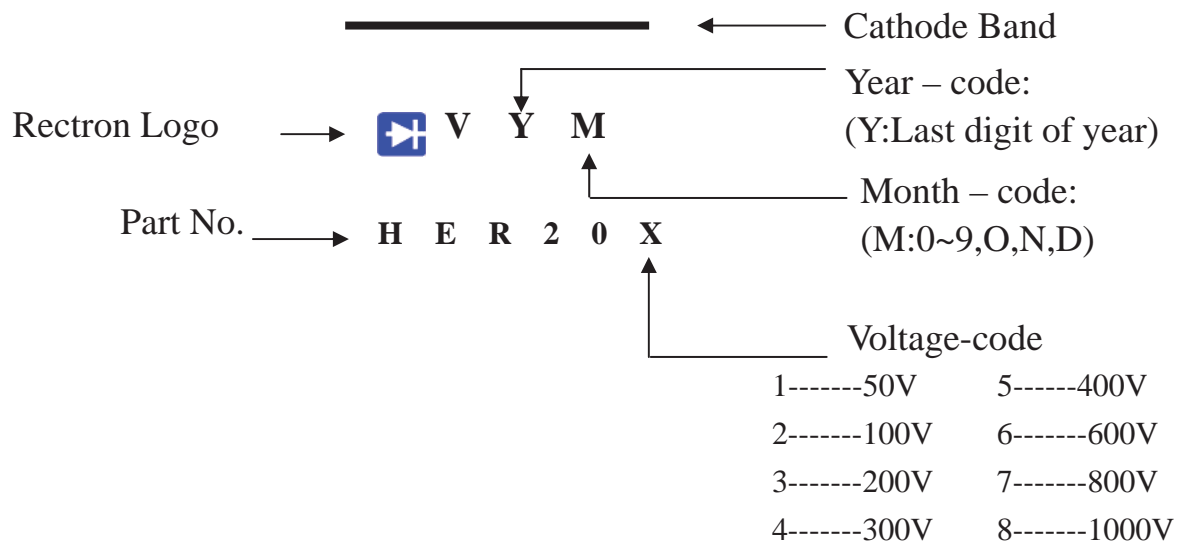
FIG.6 TYPICAL JUNCTION CAPACITANCE

THE MARKING OF HER20X

Marking Description:



Marking Description



PACKAGING OF DIODE AND BRIDGE RECTIFIERS

BULK PACK

PACKAGE	PACKING CODE	EA PER BOX	INNER BOX SIZE (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
DO-15	-B	500	194*84*21	415*220*255	25,000	12.74

eg(TYPE):HER208-B

REEL PACK

PACKAGE	PACKING CODE	EA PER REEL	EA PER INNER BOX	COMPONENT SPACE (mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
DO-15	-T	4,000	4,000	5.0	52	330	355*350*335	16,000	10.05

eg(TYPE):HER208-T

AMMO PACK

PACKAGE	PACKING CODE	REEL (EA)	COMPONENT SPACE(mm)	TAPE SPACE (mm)	BOX SIZE (mm)	CARTON SIZE(mm)	CARTON (EA)	GROSS WEIGHT (Kg)
DO-15	-F	1,500	5.0	52	255*73*100	400*268*225	15,000	8.8

eg(TYPE):HER208-F

DISCLAIMER NOTICE

Rectron Inc reserves the right to make changes without notice to any product specification herein, to make corrections, modifications, enhancements or other changes. Rectron Inc or anyone on its behalf assumes no responsibility or liability for any errors or inaccuracies. Data sheet specifications and its information contained are intended to provide a product description only. "Typical" parameters which may be included on RECTRON data sheets and/ or specifications can and do vary in different applications and actual performance may vary over time. Rectron Inc does not assume any liability arising out of the application or use of any product or circuit.

Rectron products are not designed, intended or authorized for use in medical, life-saving implant or other applications intended for life-sustaining or other related applications where a failure or malfunction of component or circuitry may directly or indirectly cause injury or threaten a life without expressed written approval of Rectron Inc. Customers using or selling Rectron components for use in such applications do so at their own risk and shall agree to fully indemnify Rectron Inc and its subsidiaries harmless against all claims, damages and expenditures.