

HIGH EFFICIENCY RECTIFIER

VOLTAGE RANGE: 50 TO 1000 VOLTS

CURRENT: 1.0 AMPERES

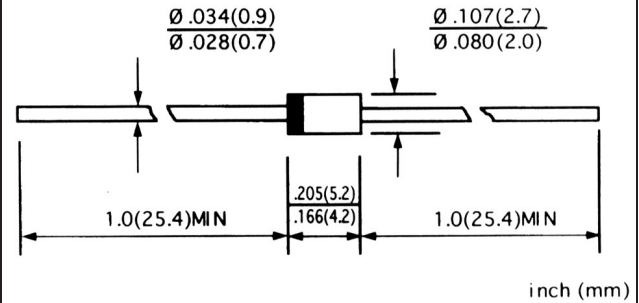
FEATURES

- Low cost
- Diffused junction
- Low leakage
- Low forward voltage drop
- High current capability
- Easily cleaned with Freon, Alcohol, Isopropanol and similar solvents
- The plastic material carries U/L recognition 94V-O

MECHANICAL DATA

Case: JEDEC DO-41, molded plastic
 Terminals: Axial leads, solder able per MIL-STD-202, Method 208
 Polarity: Color band denotes cathode
 Weight: 0.012 ounce, 0.34 gram
 Mounting position: Any

DO-41



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%.

Parameters		HER 101	HER 102	HER 103	HER 104	HER 105	HER 106	HER 107	HER 108	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 9.5mm Lead Length, @ T _A =75°C	I _(AV)	1.0								A
Peak Forward Surge Current @T _J =125°C 8.3ms Single half-sine-wave superimposed on rated load	I _{FSM}	30								A
Maximum Instantaneous Forward Voltage at 1.0A	V _F	1.0			1.3		1.7			V
Maximum Reverse Current @T _A =25°C at Rated DC Blocking Voltage @T _A =100°C	I _R	5.0 100								μA
Maximum Reverse Recovery Time (Note 1)	t _{rr}	50					70			ns
Typical junction Capacitance (Note 2)	C _j	15					12			pF
Typical Thermal Resistance (Note 3)	R _{θJA}	15								°C/W
Operating Junction Temperature Range	T _j	-65---+150								°C
Storage Temperature Range	T _{STG}	-65---+150								°C

NOTE: 1. Measured with $I_F=0.5\text{A}$, $I_R=1\text{A}$, $I_{rr}=0.25\text{A}$

2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

3. Thermal Resistance Junction to Ambient.