



# SHENZHEN FAITH TECHNOLOGY CO.,LTD

## HIGH EFFICIENCY RECTIFIER

**HER201 THRU HER208**

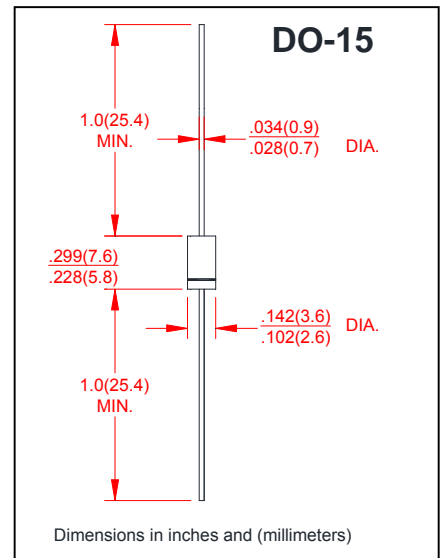
**VOLTAGE RANGE** 50 to 1000 Volts  
**CURRENT** 2.0 Ampere

**FEATURES**

- High speed switching
- Low forward voltage drop
- Low leakage current
- High forward surge capability
- High reliability
- High temperature soldering guaranteed  
 260°C/10 seconds,0.375”(9.5mm)lead length at 5 lbs(2.3kg) tension

**MECHANICAL DATA**

- Case: Transfer molded plastic
- Epoxy: UL94V-0 rate flame retardant
- Polarity: Color band denotes cathode end
- Lead: Plated axial lead, solderable per MIL-STD-202E method 208C
- Mounting position: Any



**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

- Ratings at 25°C ambient temperature unless otherwise specified
- Single Phase, half wave, 60Hz, resistive or inductive load
- For capacitive load derate current by 20%

	SYMBOLS	HER 201	HER 202	HER 203	HER 204	HER 205	HER 206	HER 207	HER 208	UNITS	
Maximum Repetitive 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 $T_A=55^\circ C$	$I_{(AV)}$	2.0								Amps	
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	60								Amps	
Maximum Instantaneous Forward Voltage at 2.0A	$V_F$	1.0			1.3		1.7			Volts	
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A = 25^\circ C$	5.0								$\mu A$	
	$T_A = 100^\circ C$	100									
Maximum Reverse Recovery Time(NOTE1)	$T_{RR}$	50					75				nS
Typical Junction Capacitance (NOTE 2)	$C_J$	30					20				pF
Typical Thermal Resistance (NOTE 3)	$R_{\theta JA}$	50								$^\circ C/W$	
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150								$^\circ C$	

**Notes:**

- 1.Reverse Recovery Test Conditions:If=0.5A,Ir=1.0A,Irr=0.25A.
- 2.Measured at 1.0MHz and applied reverse voltage of 4.0 Volts.
- 3.Thermal Resistance HERom Junction to Ambient at. 375”(9.5mm)lead length, P.C. board mounted.



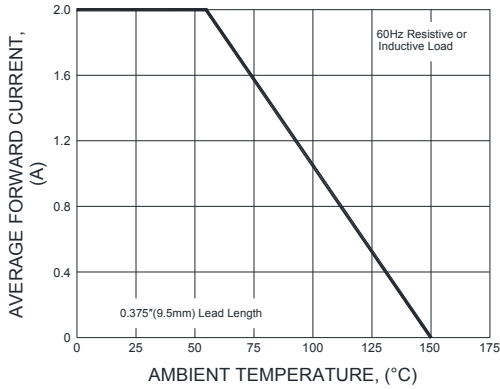
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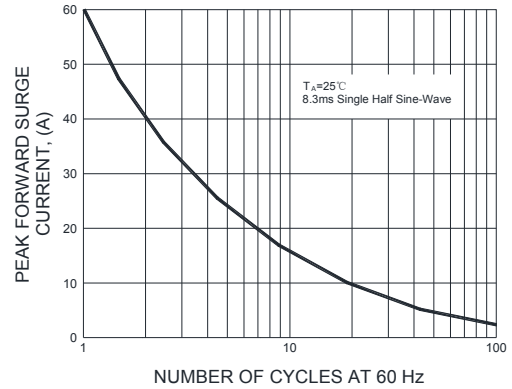
**HER201 THRU HER208**

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**CURRENT**              **2.0 Ampere**

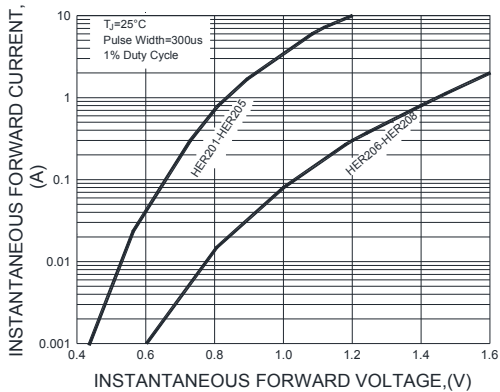
**FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE**



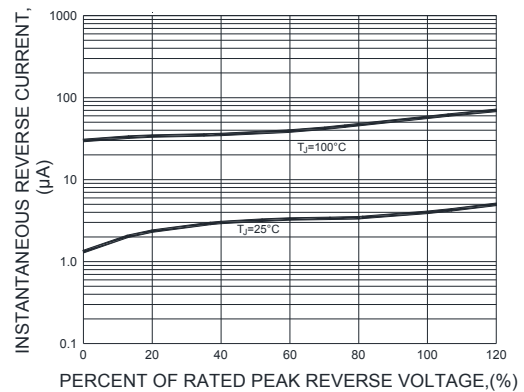
**FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



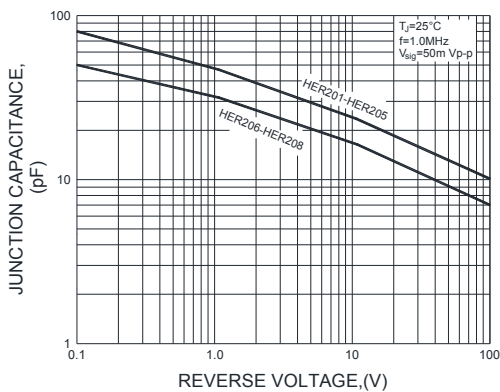
**FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG.3-TYPICAL REVERSE CHARACTERISTICS**



**FIG.5-TYPICAL JUNCTION CAPACITANCE**



**FIG.6-TEST CIRCUIT DIAGRAM AND FORWARD SURGE CURRENT**

