



CHENMKO ENTERPRISE CO.,LTD

**HER301PT
THRU
HER308PT**

HIGH EFFICIENCY RECTIFIER

VOLTAGE RANGE 50 - 1000 Volts CURRENT 3.0 Amperes

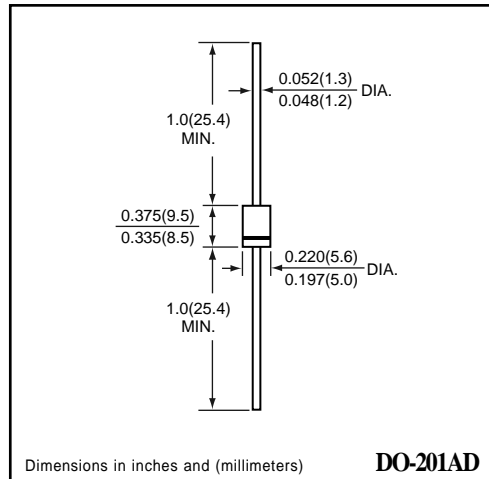
Lead free devices

FEATURES

- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * Low power loss, high efficiency
- * Low leakage
- * High current capability
- * High speed switching
- * High current surge
- * High reliability
- * Glass passivated junction
- * High temperature soldering guaranteed : 260°C/10 seconds at terminals

MECHANICAL DATA

Case: JEDEC DO-201AD molded plastic
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity: Indicated by cathode band
Weight: 1.20 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%.

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

RATINGS	SYMBOL	HER301PT	HER302PT	HER303PT	HER304PT	HER305PT	HER306PT	HER307PT	HER308PT	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	300	400	600	800	1000	Volts
Maximum RMS Voltage	VRMS	35	70	140	210	280	420	560	700	Volts
Maximum DC Blocking Voltage	Vdc	50	100	200	300	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at TA = 50°C	Io	3.0								Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	200					150			Amps
Typical Junction Capacitance (Note 1)	CJ	70					50			pF
Operating and Storage Temperature Range	TJ, TSTG	-65 to +150								°C

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

CHARACTERISTICS	SYMBOL	HER301PT	HER302PT	HER303PT	HER304PT	HER305PT	HER306PT	HER307PT	HER308PT	UNITS	
Maximum Instantaneous Forward Voltage at 3.0 A DC	VF	1.0		1.3		1.50		1.70		Volts	
Maximum DC Reverse Current at Rated DC Blocking Voltage at TA = 25°C	IR	10								uAmps	
Maximum Full Load Reverse Current Average, Full Cycle 0.375" (9.5mm) lead length at TL = 55°C		150								uAmps	
Maximum Reverse Recovery Time (Note 2)	trr	50					70				nSec

NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 4.0 volts
 2. Test Conditions : IF = 0.5 A, IR = -1.0 A, IRR = -0.25 A

RATING CHARACTERISTIC CURVES (HER301PT THRU HER308PT)

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

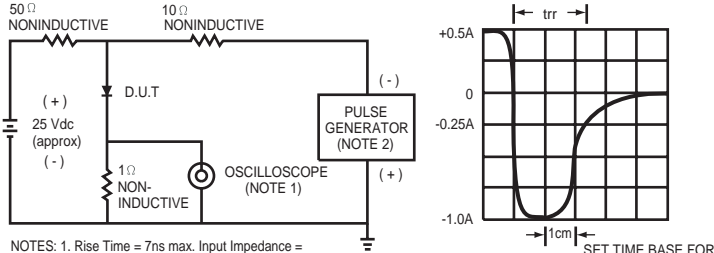


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

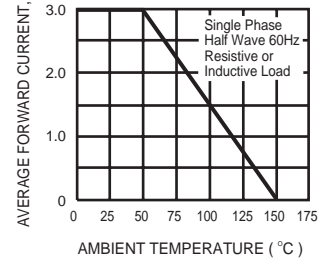


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

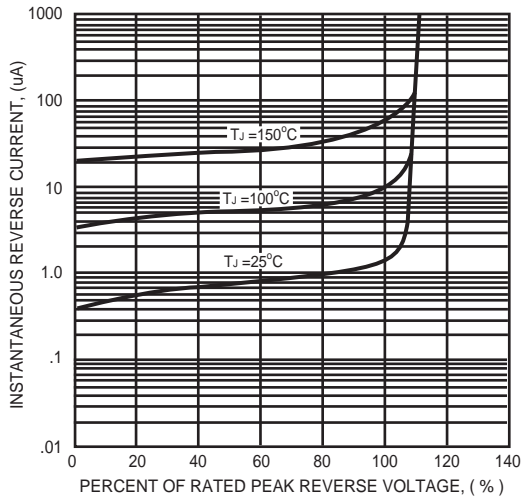


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

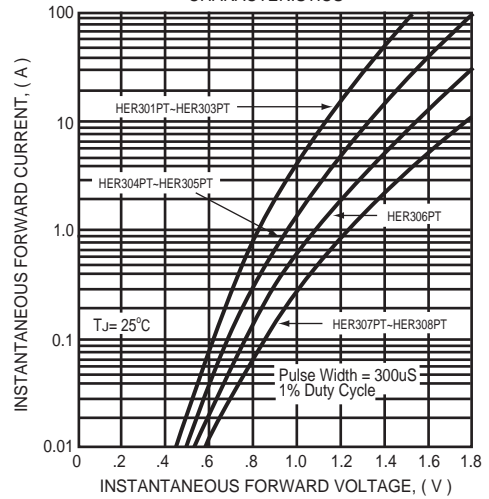


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

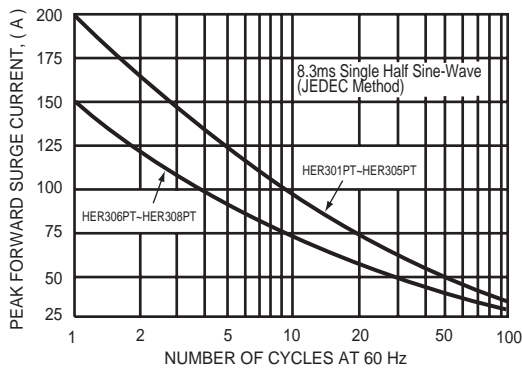


FIG. 6 - TYPICAL JUNCTION CAPACITANCE

