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HER301 Thru HER308

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Low forward voltage drop
- High reliability and High surge current capability
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1 Halogen free available upon request by adding suffix "-HF"

Maximum Ratings

Operating Temperature: -55°C to +150°C Storage Temperature: -55°C to +150°C

Typical Thermal Resistance: 30°C/W Junction To Lead

MCC Part	Device	Maximum	Maximum	Maximum
Number	Marking	Recurrent	RMS	DC
		Peak Reverse	Voltage	Blocking
		Voltage		Voltage
HER301	HER301	50V	35V	50V
HER302	HER302	100V	70V	100V
HER303	HER303	200V	140V	200V
HER304	HER304	300V	210V	300V
HER305	HER305	400V	280V	400V
HER306	HER306	600V	420V	600V
HER307	HER307	800V	560V	800V
HER308	HER308	1000V	700V	1000V

Electrical Characteristics @ 25% Unless Otherwise Specified

Average Forward Current	I _{F(AV)}	3.0A	T _A = 55°C
Peak Forward Surge Current	I _{FSM}	150A	8.3ms, half sine
Maximum Instantaneous Forward Voltage HER301-HER303 HER304-HER305 HER306-HER308	V _F	1.0V 1.3V 1.7V	I _{FM} = 3.0A; T _A = 25°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I _R	10uA 200uA	T _A = 25°C T _A = 100°C
Maximum Reverse Recovery Time HER301-HER305 HER306-HER308	Trr	50ns 75ns	I _F =0.5A, I _R =1.0A I _{RR} =0.25A
Typical Junction Capacitance HER301-HER305 HER306-HER308	С	80pF 50pF	Measured at 1.0MHz, V _R =4.0V

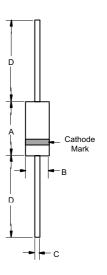
Notes:1.High Temperature Solder Exemption Applied, see EU Directive Annex 7.

DO-201AD

3.0 Amp High

Efficient Rectifiers

50 to 1000 Volts



DIMENSIONS							
	INCHES		MM				
DIM	MIN	MAX	MIN	MAX	NOTE		
Α	.287	.374	7.30	9.50			
В	.189	.208	4.80	5.30			
С	.048	.052	1.20	1.30			
D	1.000		25.40				



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RATINGS AND CHARACTERISTIC CURVES

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

 $\begin{array}{c} 50\Omega \\ \text{NONINDUCTIVE} \end{array}$ 10Ω NONINDUCTIVE DUT (+) 50Vdc (approx) (-) PULSE IΩ NON (INDUCTIVE OSCILLOSCOPE (NOTE 1) NOTES: 1. Rise Time=7ns max. Input Impedance= 1 megohm 22pf 2. Rise Time=10ns max. Sourse Impedance= 50 ohms

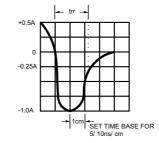


FIG.2- MAXIMUM AVERAGE FORWARD CURRENT DERATING

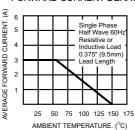


FIG.3- TYPICAL REVERSE CHARACTERISTICS

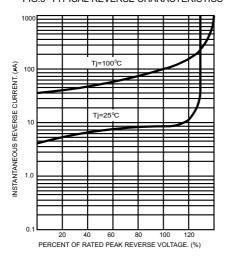
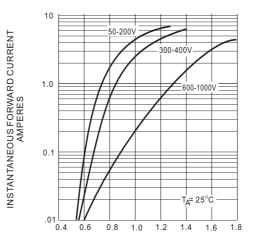


FIG.5- TYPICAL FORWARD CHARACTERISTICS



INSTANTANEOUS FORWARD VOLTAGE, VOLTS

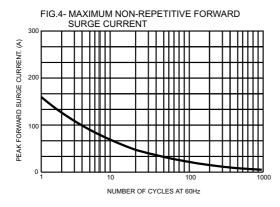
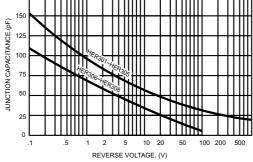


FIG.6- TYPICAL JUNCTION CAPACITANCE





Ordering Information:

Device	Packing
Part Number-TP	Tape&Reel: 1.2Kpcs/Reel
Part Number-AP	Ammo Packing: 1.2Kpcs/Ammo Box
Part Number-BP	Bulk: 12Kpcs/Carton

Note: Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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