

HER2001 thru HER2007

GOOD-ARK Electronics

2A,50-1000V High Efficient Rectifiers

Features

- Low leakage current
- Low forward voltage drop
- Glass passivated chip junction
- For general purpose applications
- Moisture sensitivity: level 1, per J-STD-020
- For fast switching and low logic level applications
- High temperature soldering guaranteed: 260°C/10 seconds



DO-15(DO-204AC)

Applications

• Small battery charger, Power supplies

Maximum Ratings & Electrical Characteristics(TA=25°C unless otherwise noted)									
Parameter	Symbol	HER2001	HER2002	HER2003	HER2004	HER2005	HER2006	HER2007	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current	lf(av)	2					А		
Peak forward surge current,8.3ms single half sine-wave superimposed on rated load per diode	Ігѕм	60					A		
Operating junction temperature range	TJ	-55 to +135					°C		
Storage temperature range	T _{STG}	-55 to +150					°C		

Thermal-Mechanical Specifications (TA=25°C unless otherwise noted)							
Parameter	Symbol	Тур	Unit				
Thermal Resistance, Junction to Ambient	R _{0JA}	69	°C /W				
Thermal Resistance, Junction to Case	Rejc	37	°C /W				
Thermal Resistance, Junction to Lead	Rejl	28	°C /W				



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Electrical Specifications (TA=25°C unless otherwise noted)										
Parameter	Symbol	Test Conditions	HER2001	HER2002	HER2003	HER2004	HER2005	HER2006	HER2007	Unit
Forward Drop Voltage	VF	I⊧=2A	1.0 1.3 1.7				V			
Reverse leakage I _R current @V _R	TJ =25℃	5								
	IR	T」=125℃	100						- uA	
Typical junction capacitance	CJ	4.0 V 1 MHZ	50 30					pF		
Maximum reverse	trr	I _F =0.5A, I _R =1.0A,				50 75				nS
recovery time		I _{RR} =0.25A								

Note:

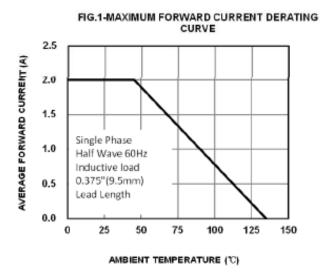
1. Valid provided that leads at a distance of 9.5 mm from case are kept at ambient temperature.



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Ratings and Characteristics Curves

(TA = 25°C unless otherwise noted)



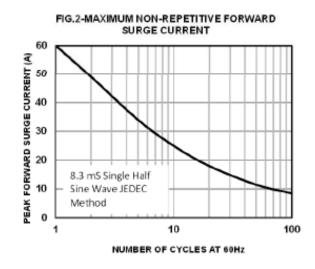


FIG.3-TYPICAL FORWARD CHARACTERISTICS

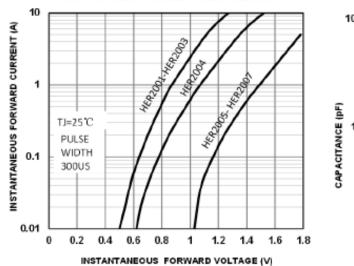
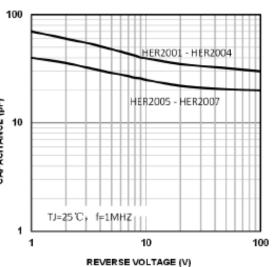


FIG.4-TYPICAL JUNCTION CAPACITANCE





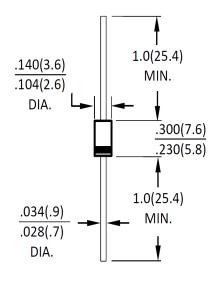
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Package Outline Dimensions

in inches (millimeters)

DO-15(DO-204AC)



Dimensions in inches and (millimeters)

Revision History

Document Version	Date of release	Description of changes				
Rev.A	2021.06.01	Released Datasheet				
Rev.B	2024.02.23	Modify document format				



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