

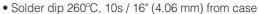
# 1 0 Case Case Positive

**TO-220AC** 

#### Voltage Current 200 to 1000 V 8.0 A

#### **FEATURES**

- Ultrafast recovery time for high efficiency
- Low power losses
- Low forward voltage drop
- High forward surge current capability





 Meets MSL level 1, per J-STD-020, LF maximum peak of 260° C



# RoHS

#### **MECHANICAL DATA**

- Case: TO-220AC. Epoxy meets UL 94V-0 flammability rating.
- Polarity: As marked on the body.
- Mounting Torque: 5 in-lbs maximum.
- **Terminals:** Matte tin plated leads, solderable per MIL-STD-750 Method 2026, J-STD-002 and JESD22-B102. Consumer grade, meets JESD 201 class 1A whisker test.

#### **TYPICAL APPLICATIONS**

Used in high frequency rectifier of switching mode power supplies, inverters, freewheeling diodes, dc-to-dc converters, and other power switching application.

#### Maximun Ratings and Electrical Characteristics at 25°C

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		HERA803G	HERA805G	HERA806G	HERA808G	
$V_{RRM}$	Peak Recurrent Peak Reverse Voltage (V)	200	400	600	1000	
V <sub>RMS</sub>	Maximum RMS Voltage (V)	140	280	420	700	
$V_{DC}$	Maximum DC Blocking Voltage (V)	200	400	600	1000	
I <sub>F(AV)</sub>	Max. Average Forward Rectified Current 9.5mm Lead Lenght at $T_C = 100  ^{\circ}\text{C}$		8.0	) A		
I <sub>FSM</sub>	Peak Forward Surge Current 8.3 ms. single Half Sine-wave Superimposed on Rated Load (JEDEC Method)		150	O A		
T <sub>rr</sub>	Maximum Reverse Recovery Time From $I_F$ = 0.5 A; $I_R$ = 1 A; $I_{RR}$ = 0.25 A	50 nS 80 nS		nS		
C <sub>j</sub>	Typical Junction Capacitance at 1MHz and reverse voltage of 4V <sub>DC</sub>	65 pF 55 pF		pF		
Tj	Operating temperature range	− 65 to + 150 °C				
T <sub>stg</sub>	Storage temperature range	− 65 to + 150 °C				

#### Electrical Characteristics at Tamb = 25 °C

V <sub>F</sub>	Max. Instantaneous Forward Voltage @ 8.0 A	1.0 V	1.3 V	1.7 V
$I_R$	Maximum DC Reverse Current  @ T <sub>A</sub> = 25 °C at Rated DC Blocking Voltage  @ T <sub>A</sub> = 125 °C	10.0 μA 400 μA		
R <sub>thj-C</sub>	Typical Thermal Resistance (Note 1)		2.0 °	°C/W

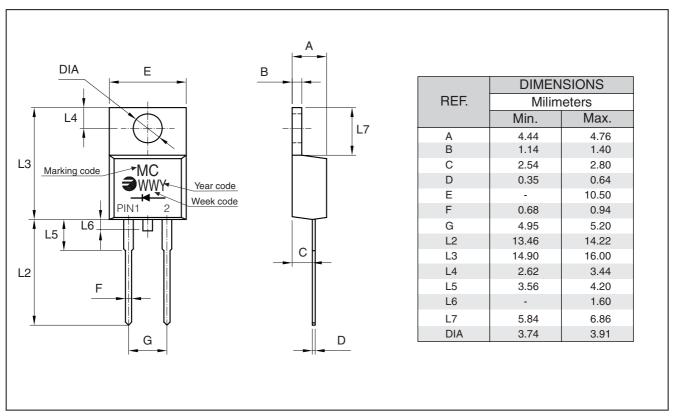
Note: 1. Mounted on Heatsink Size of 50.8 mm x 76.2 mm x 6.35 mm Al-Plate.



# **Ordering information**

PREFERRED P/N	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY	UNIT WEIGHT (g)
HERA805G 00TUC	TU	TUBE	2,000	2.24

# Package Outline Dimensions: (mm) TO-220AC

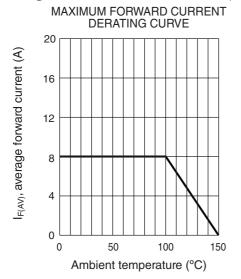


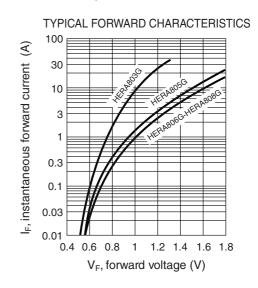
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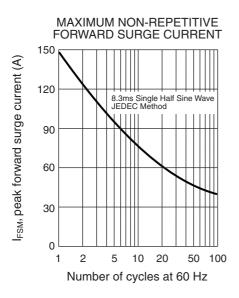
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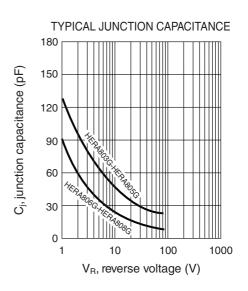


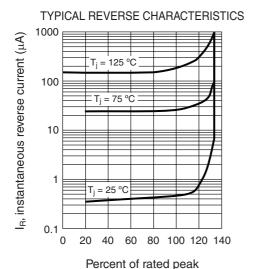
### Ratings and Characteristics (Ta 25 °C unless otherwise noted)







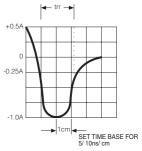




reverse voltage (%)

# NON INDUCTIVE NON INDUCTIVE +0.8 To put the sound of the sound of

REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM





#### **Revision History**

Date	Revision	Description of Changes
15-Mar-2009	0	Original Data Sheet
21-Sep-2016	1	Format update

#### **Disclaimer**

All product, product specifications and data are subject to change without notice to improve reliability, function or design or otherwise.

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