

1.0 Amp. Glass Passivated Ultrafast Recovery Rectifier

A-405 	Voltage 200 to 1000 V <div style="text-align: right; margin-top: -20px;"> HYPERECTIFIER  </div>	Current 1.0 A <div style="text-align: right; margin-top: -20px;">  </div>
FEATURES <ul style="list-style-type: none"> • Ultrafast recovery time for high efficiency • Low power losses • Low forward voltage drop • High forward surge current capability • Solder dip 260°C, 10s • AEC-Q101 qualified • Component in accordance to RoHS 2011/65/EU and WEEE 2002/96/EC • Meets MSL level 1, per J-STD-020, LF maximum peak of 260°C 		
MECHANICAL DATA <ul style="list-style-type: none"> • Case: A-405. Epoxy meets UL 94V-0 flammability rating. • Polarity: Color band denotes cathode end. • Terminals: Matte tin plated leads, solderable per MIL-STD-750 Method 2026, J-STD-002 and JESD22-B102. Consumer grade, meets JEDEC 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.		

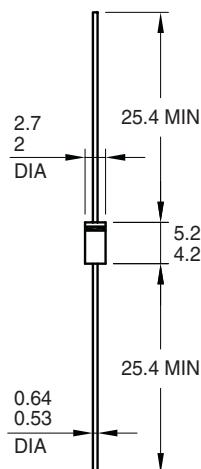
Maximum Ratings and Electrical Characteristics at 25°C

		HER103SG	HER105SG	HER106SG	HER107SG	HER108SG			
	Marking Code	HER103SG	HER105SG	HER106SG	HER107SG	HER108SG			
V_{RRM}	Maximum Recurrent Peak Reverse Voltage (V)	200	400	600	800	1000			
V_{RMS}	Maximum RMS Voltage (V)	140	280	420	560	700			
V_{DC}	Maximum DC Blocking Voltage (V)	200	400	600	800	1000			
$I_{F(AV)}$	Maximum Average Forward Rectified Current 9.5mm Lead Length @ $T_A = 55^\circ C$	1.0 A							
I_{FSM}	Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	30 A							
V_F	Maximum Instantaneous Forward Voltage at 1.0A (Note 1)	1.0 V	1.3 V	1.7 V					
I_R	Maximum DC Reverse Current @ $T_A = 25^\circ C$ at Rated DC Blocking Voltage @ $T_A = 125^\circ C$	5.0 μA 150 μA							
T_{rr}	Maximum Reverse Recovery Time from $I_F = 0.5A$; $I_R = 1A$; $I_{RR} = 0.25A$	50 ns		75 ns					
C_j	Typical Junction Capacitance at 1 MHz and reverse voltage of 4V _{DC}	20 pF		15 pF					
$R_{th(j-a)}$	Typical Thermal Resistance (Note 2)	90 $^\circ C/W$							
T_j	Operating Temperature Range	-65 to + 150 $^\circ C$							
T_{stg}	Storage Temperature Range	-65 to + 150 $^\circ C$							

Notes: 1. Pulse Test: 300 μ s Pulse Width, 1% Duty Cycle
 2. Mount on Cu-Pad size 5mm x 5mm on PCB.

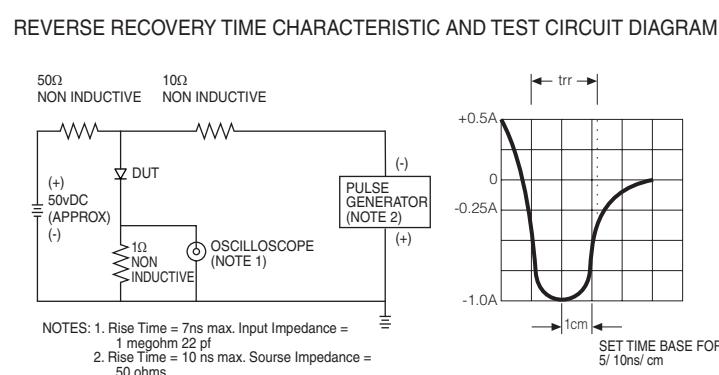
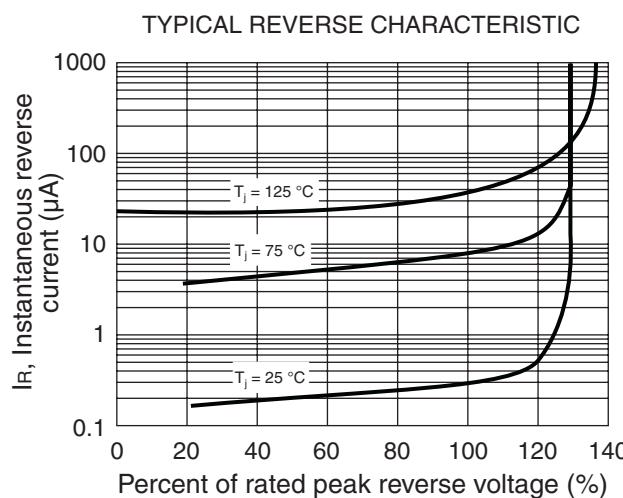
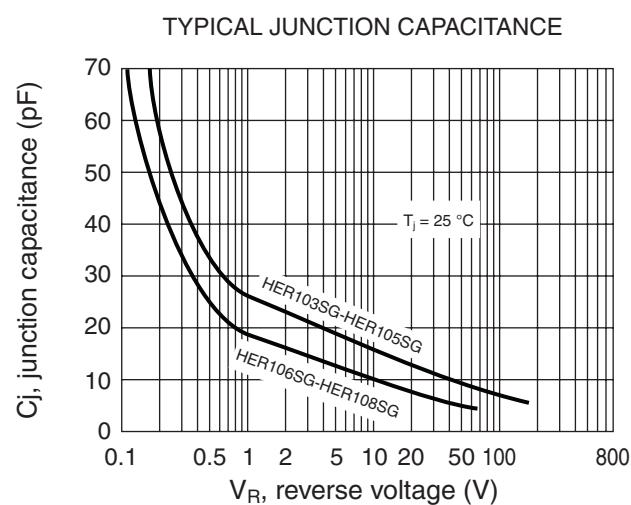
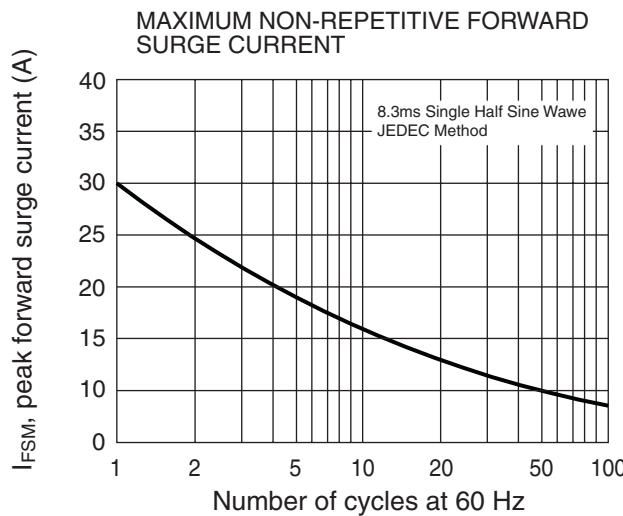
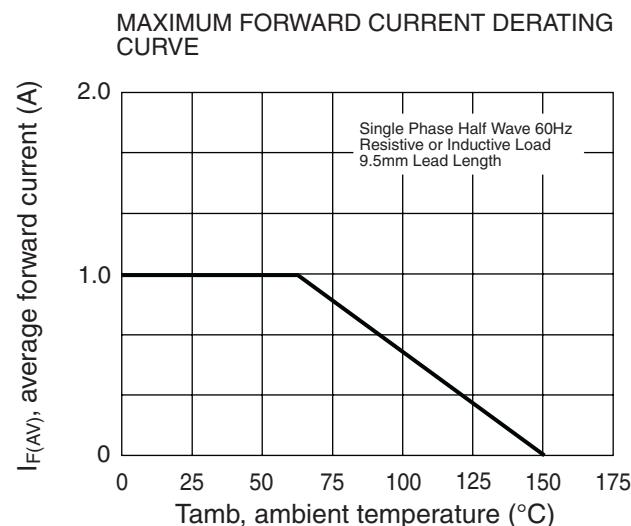
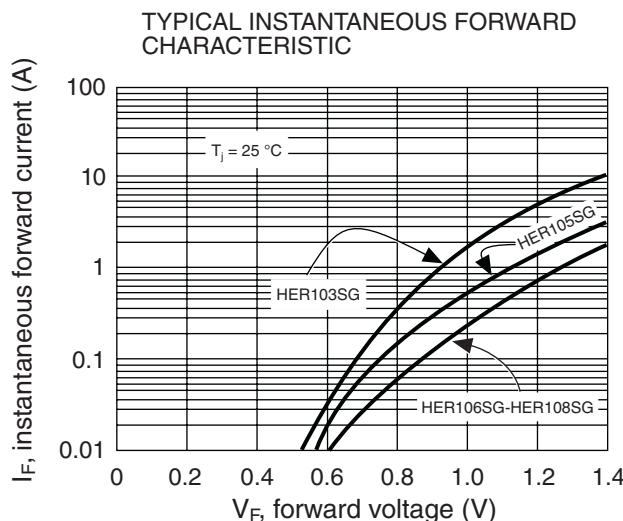
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Ordering information

PREFERRED P/N	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY	UNIT WEIGHT (g)
HER105SG AMP	AMP	AMMO BOX	3,000	0.22
HER105SG TR	TR	14" diameter tape and reel	5,000	0.22

Package Outline Dimensions: (mm) A-405


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



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Disclaimer

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