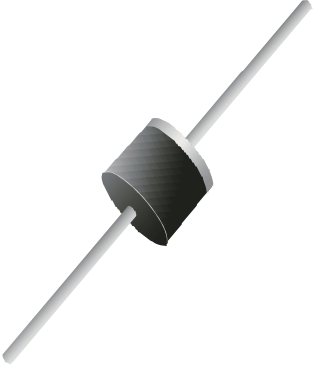





6.0 Amp. Glass Passivated Ultrafast Recovery Rectifier

 <p>R-6</p>	Voltage 200V to 1000V	Current 6.0 A	
			
	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 		  RoHS COMPLIANT
	MECHANICAL DATA <ul style="list-style-type: none"> Case: R-6. 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 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.			

Maximum Ratings and Electrical Characteristics at 25°C

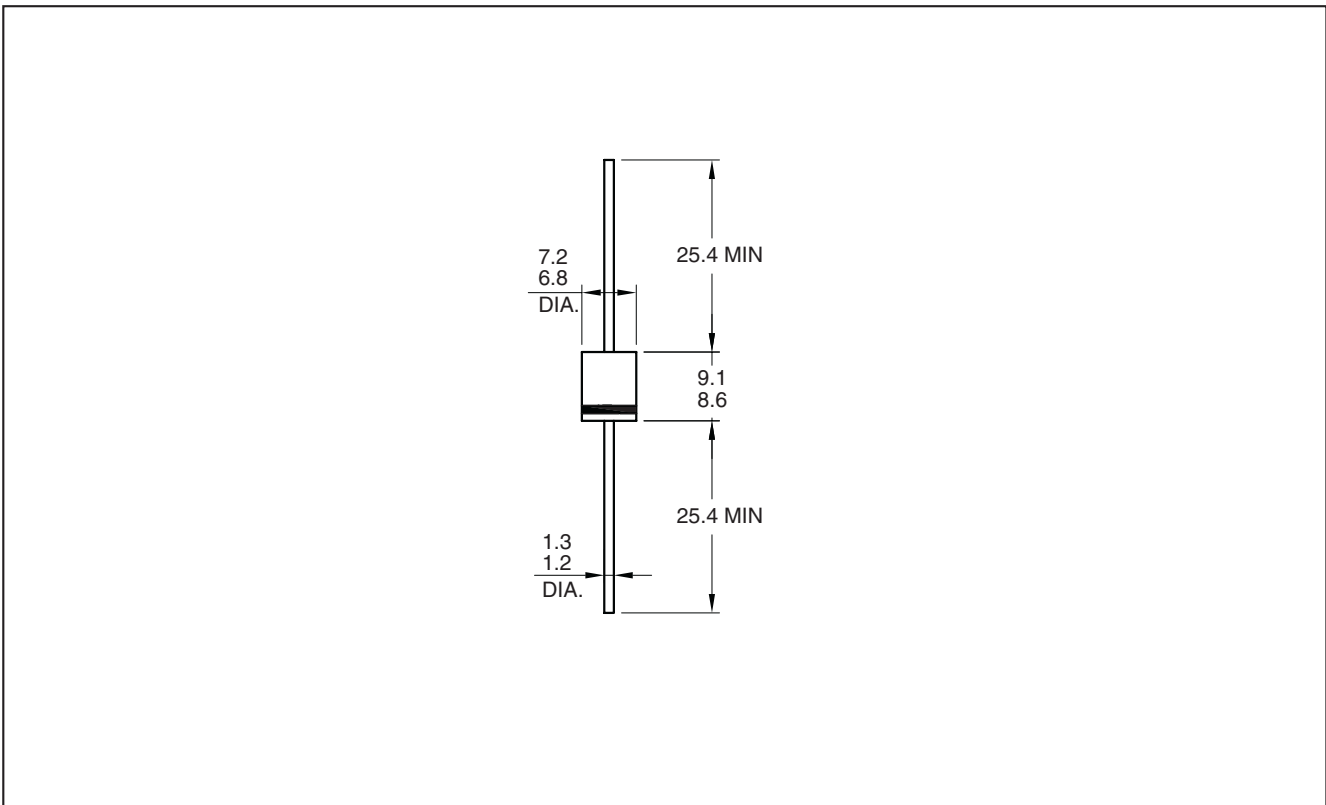
Marking Code		HER603G	HER605G	HER606G	HER607G	HER608G
V_{RRM}	Maximum Recurrent Peak Reverse Voltage (V)	200	400	600	800	1000
V_{RMS}	Maximum RMS Voltage (V)	140	280	420	560	700
V_{DC}	Maximum DC Blocking Voltage (V)	200	400	600	800	1000
$I_{F(AV)}$	Maximum Average Forward Rectified Current 9.5mm Lead Length @ $T_A = 55^\circ C$	6.0 A				
I_{FSM}	Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	150 A				
V_F	Maximum Instantaneous Forward Voltage at 8.0A	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 @ $T_A = 125^\circ C$	10 μA 200 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 $4V_{DC}$	80 pF		65 pF		
$R_{th(j-a)}$	Typical Thermal Resistance	37 $^\circ C/W$				
T_j	Operating Temperature Range	-65 to + 150 $^\circ C$				
T_{stg}	Storage Temperature Range	-65 to + 150 $^\circ C$				

6.0 Amp. Glass Passivated Ultrafast Recovery Rectifier

Ordering information

PREFERRED P/N	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY	UNIT WEIGHT (g)
HER605G TR	TR	14" diameter tape and reel	1,000	1.65

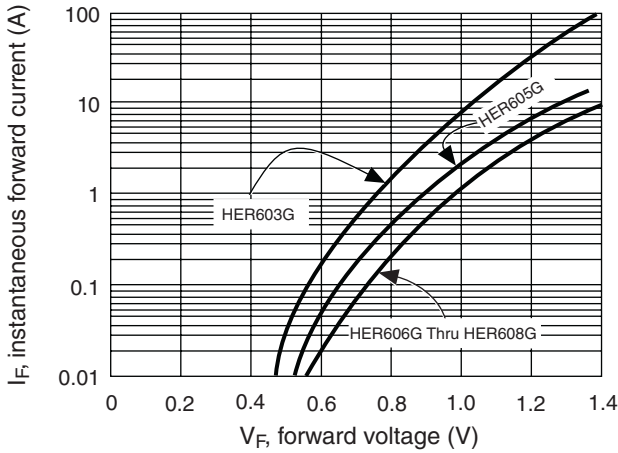
Package Outline Dimensions: (mm) R-6



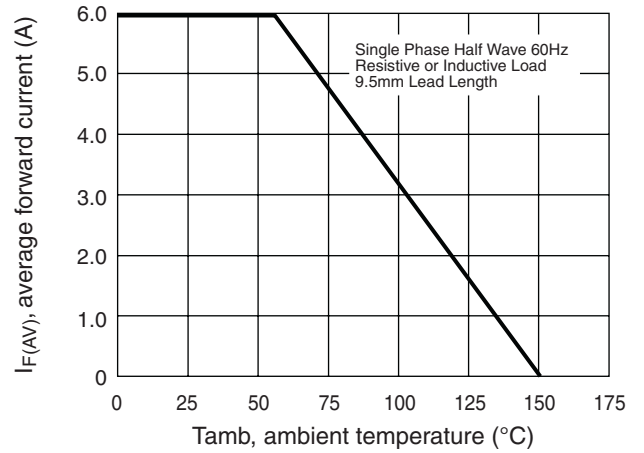
6.0 Amp. Glass Passivated Ultrafast Recovery Rectifier

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

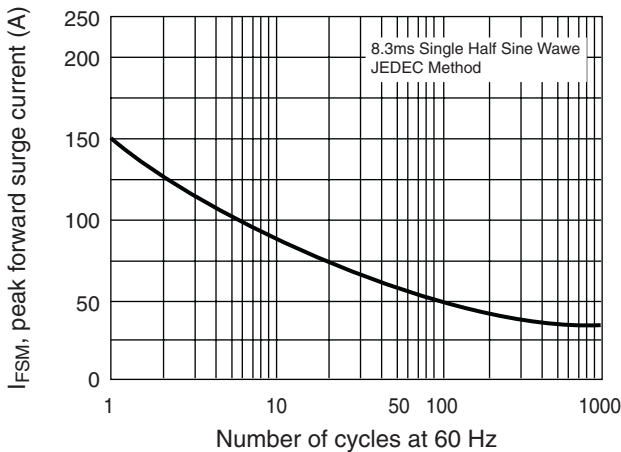
TYPICAL FORWARD CHARACTERISTIC



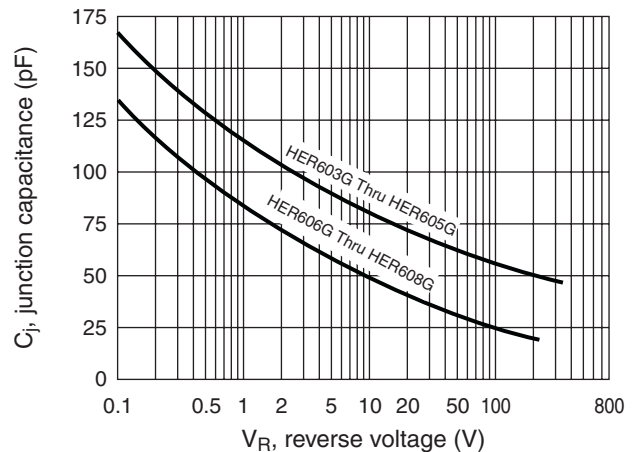
MAXIMUM FORWARD CURRENT DERATING CURVE



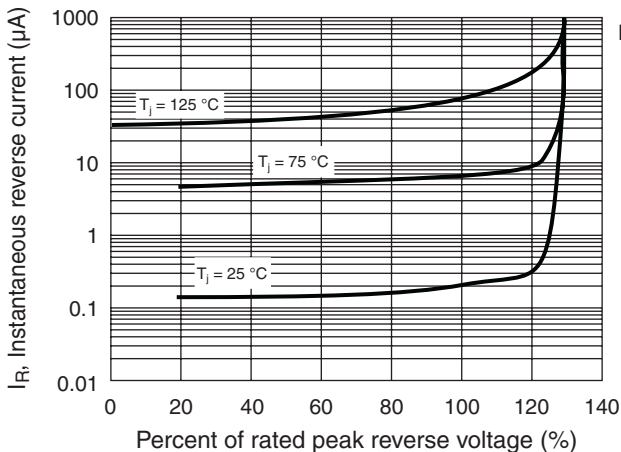
MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



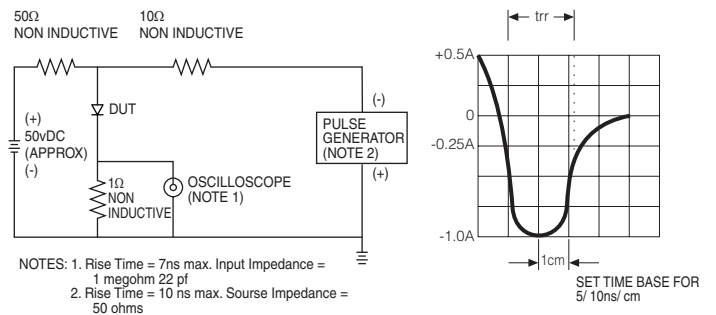
TYPICAL JUNCTION CAPACITANCE



TYPICAL REVERSE CHARACTERISTIC



REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



6.0 Amp. Glass Passivated Ultrafast Recovery Rectifier**Revision History**

Date	Revision	Description of Changes
20-Jun-2008	0	Original Data Sheet
5-Jul-2016	1	Format update

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