Elektronische Bauelemente

HER201G ~ HER207G

Voltage 50V~ 1000V

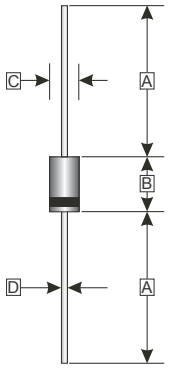
2.0 Amp Glass Passivated High Efficiency Rectifiers

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- High speed switching

DO-15



REF.	Millimeter	
	Min.	Max.
A	25.4 (TYP)	
B	5.80	7.62
C	2.60	3.60
D	-	0.90

PACKAGING INFORMATION

- Glass Passivated
- Case: Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- Polarity: Color band denotes cathode end
- Mounting position: Any
- Weight: 0.4300 grams (approximately)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, de-rate current by 20%.)

Parameter		Symbol	Part Number							Unit
			HER 201G	HER 202G	HER 203G	HER 204G	HER 205G	HER 206G	HER 207G	
Maximum Recurrent 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 Instantaneous Forward Voltage @ I_F=2A		V_F	1			1.3	1.85			V
Maximum Average Forward Rectified Current @ 0.375" (9.5mm) lead length, T_A=50°C		I_O	2.0							A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I_{FSM}	60							A
Maximum DC Reverse Current	T_A=25°C	I_R	5.0							μA
	T_A=100°C		150							
Maximum Reverse Recovery Time [1]		T_{RR}	50				70			nS
Typical Junction Capacitance [2]		C_J	30							pF
Storage Temperature Range		T_{STG}	-65~150							°C

Note:
1. I_F=0.5A, I_R=1A, I_{RR}=0.25A.
2. f=1MHz and applied 4V DC reverse voltage.

RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CHARACTERISTICS

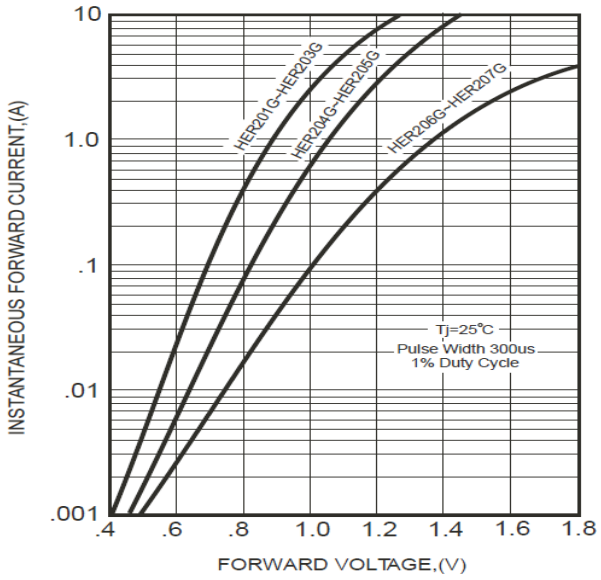


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

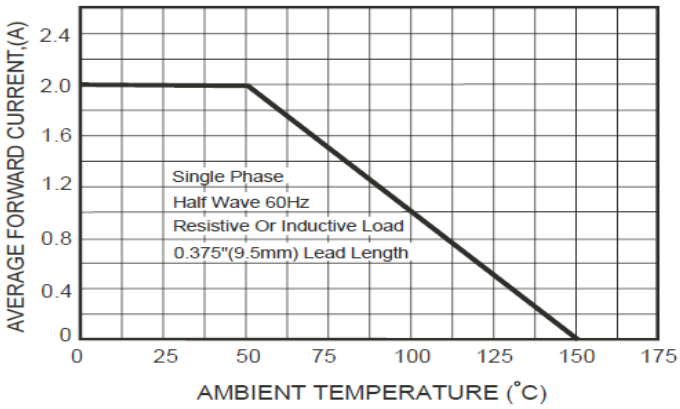
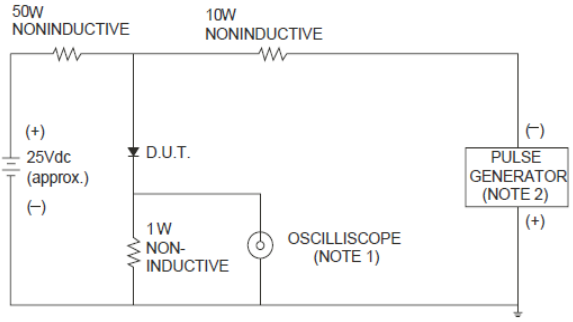


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm.22pF.

2. Rise Time= 10ns max., Source Impedance= 50 ohms.

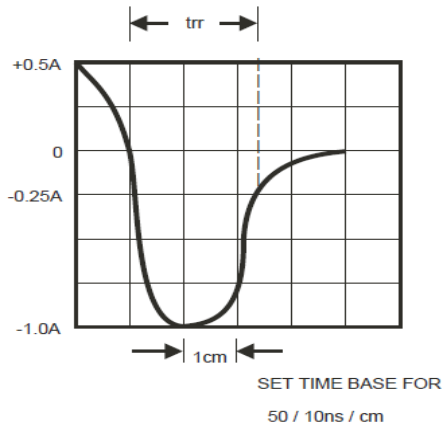


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

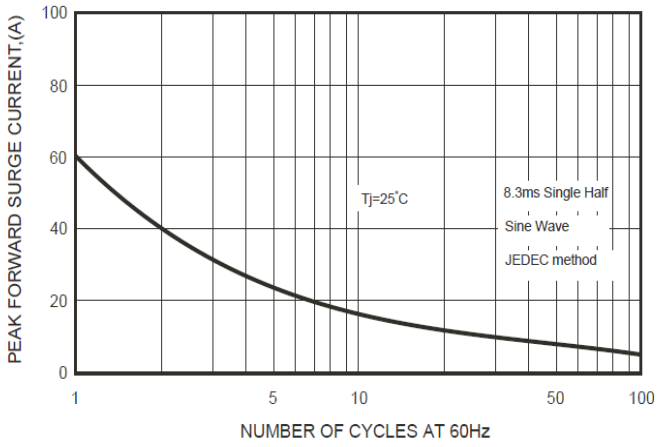


FIG.5-TYPICAL JUNCTION CAPACITANCE