

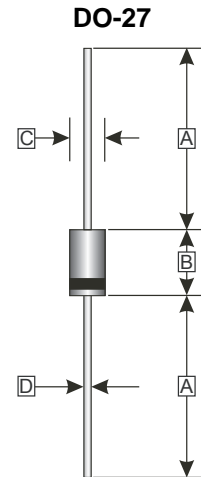
RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

## FEATURES

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

## MECHANICAL DATA

- Case: Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Axial leads, solderable per MIL-STD-202, Methode 208 guaranteed
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 1.10 grams



REF.	Millimeter	
	Min.	Max.
A	25.4 (TYP)	
B	7.20	9.53
C	4.80	5.60
D	1.10	1.32

## 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 501G	HER 502G	HER 503G	HER 504G	HER 505G	HER 506G	HER 507G	
Maximum Recurrent 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 9.5mm Lead length @ $T_A=50^\circ C$	$I_F$	5.0							A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC methode)	$I_{FSM}$	100							A
Maximum Instantaneous Forward Voltage @ 5.0A	$V_F$	1.0		1.3		1.85			V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A=25^\circ C$	10							$\mu A$
	$T_A=100^\circ C$	200							
Maximum Reverse Recovery Time <sup>1</sup>	$T_{RR}$	50			70				nS
Typical Junction Capacitance <sup>2</sup>	$C_J$	100							pF
Operating & Storage Temperature	$T_J, T_{STG}$	-55~150							$^\circ C$

Note:

1. Reverse Recovery Time test condition:  $I_F=0.5A$ ,  $I_R=1.0A$ ,  $I_{RR}=0.25A$
2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

**RATINGS AND CHARACTERISTIC CURVES**

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

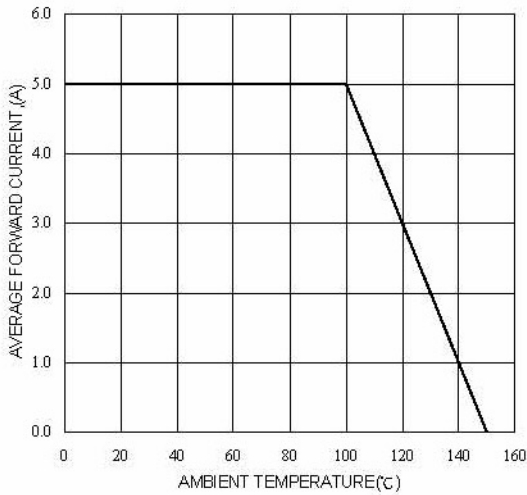


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

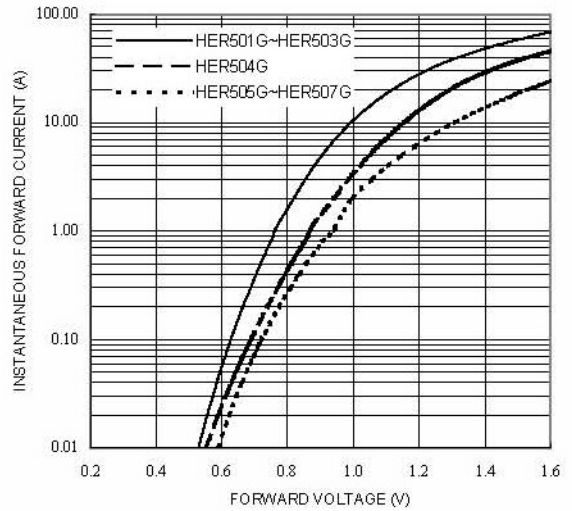


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

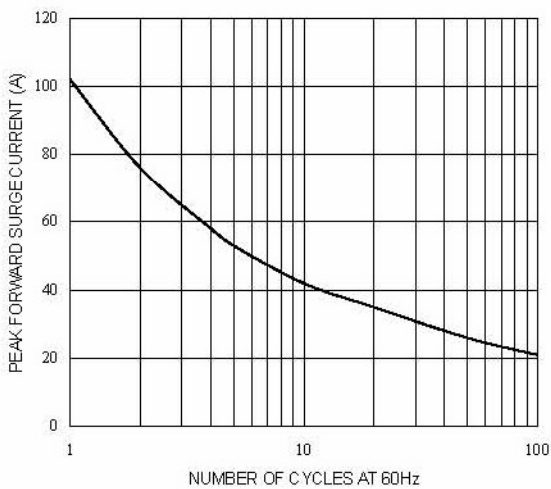


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

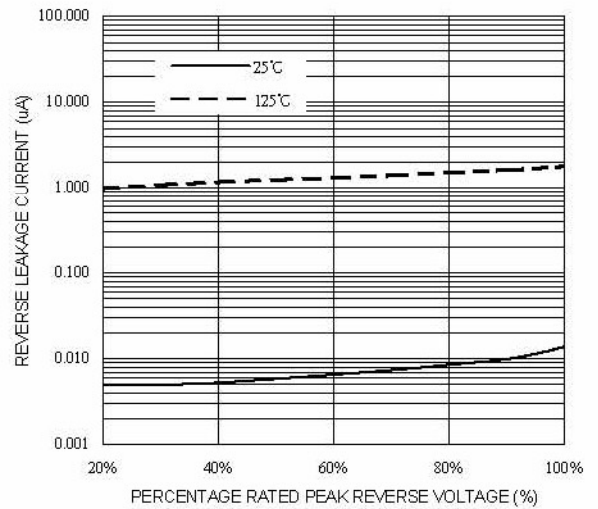


FIG. 5-TYPICAL JUNCTION CAPACITANCE

