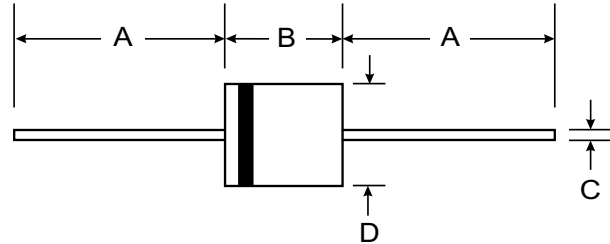


### Features

- High Surge Current Capability
- Low Leakage and Forward Voltage Drop
- Plastic Material - UL Flammability Classification 94V-0
- Low Power Loss, High Efficiency



### Mechanical Data

- Case: Molded Plastic
- Terminals: Axial Leads, Solderable per MIL-STD-202, Method 208
- Polarity: Color Band Indicates Cathode
- Approx. Weight: 1.7 grams
- Mounting Position: Any

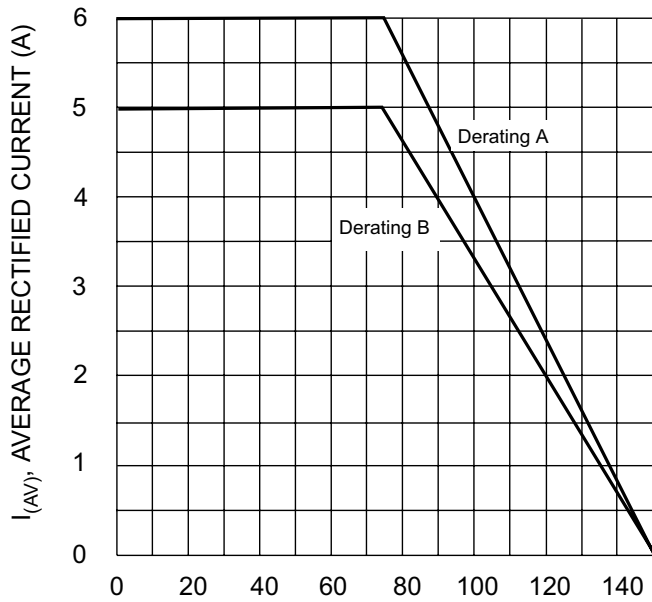
R-6		
Dim	Min	Max
A	25.4	—
B	8.6	9.1
C	1.2	1.3
All Dimensions in mm		

### Maximum Ratings and Electrical Characteristics

Ratings at 25° C ambient temperature unless otherwise specified.  
Single phase, half wave, 60Hz, resistive or inductive load.

Characteristic	Symbol	HER601	HER602	HER603	HER604	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	300	V
Maximum RMS Voltage	$V_{RSM}$	35	70	140	210	V
Maximum dc Blocking Voltage	$V_{DC}$	50	100	200	300	V
Maximum Average Forward Rectified Current (Fig. 1)	$I_{(AV)}$	6.0				A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	250				A
Maximum Instantaneous Forward Voltage at 6.0A dc	$V_F$	1.2				V
Maximum dc Reverse Current at Rated dc Blocking Voltage $T_A = 25^\circ\text{C}$	$I_R$	10				$\mu\text{A}$
Maximum Reverse Recovery Time (Note 1)	$T_{RR}$	60				ns
Maximum Full Load Reverse Current Full Cycle Average 9.5mm lead length at $T_C = 55^\circ\text{C}$	$I_R$	150				$\mu\text{A}$
Typical Junction Capacitance (Note 2)	$R_{\theta JA}$	100				pF
Operating and Storage Temperature Range	$T_J, T_{STG}$	-65 to +150				$^\circ\text{C}$

- Notes: 1. Reverse Recovery Test Conditions:  $I_F = 0.5\text{ A}$ ,  $I_R = 1.0\text{ A}$ ,  $I_{RR} = 0.25\text{ A}$   
2. Measured at 1.0 MHz and applied reverse voltage of 4.0 volts.



$T_A$ , AMBIENT TEMPERATURE ( $^{\circ}C$ )  
Fig. 1, Forward Current Derating Curve

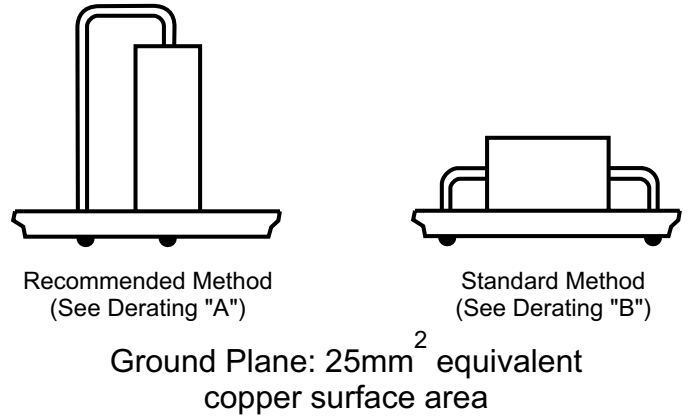
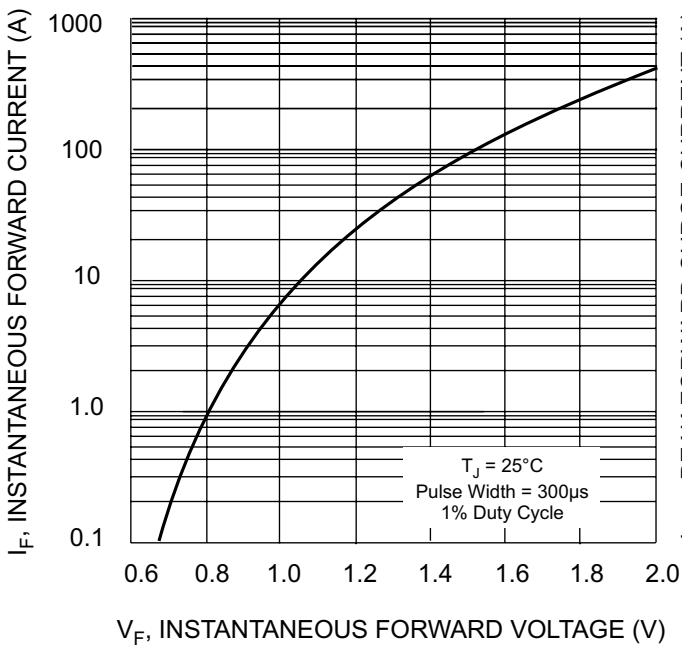
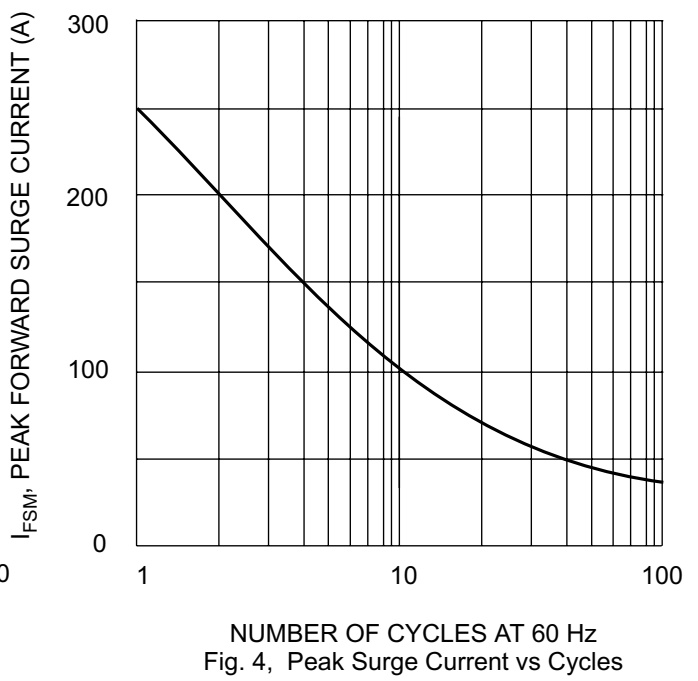


Fig. 2, Printed Circuit Board Mounting Method



$V_F$ , INSTANTANEOUS FORWARD VOLTAGE (V)  
Fig. 3, Typical Forward Characteristics



NUMBER OF CYCLES AT 60 Hz  
Fig. 4, Peak Surge Current vs Cycles