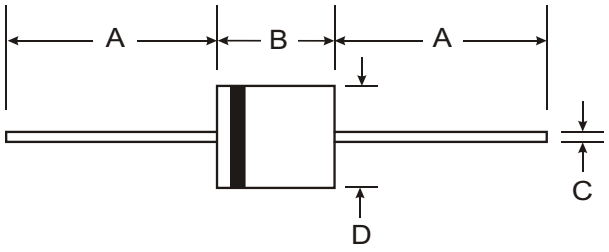
HER601 - HER604

6.0A HIGH EFFICIENCY RECTIFIER

Features

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



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

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

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 6.0Adc	V_F	1.2				V
Maximum dc Reverse Current at Rated dc Blocking Voltage T_A = 25°C	I_R	10				μA
Maximum Reverse Recovery Time (Note 1)	T_{RR}	60				ns
Maximum Full Load Reverse Current Full Cycle Average 9.5mm lead length at TC = 55°C	I_R	150				μA
Typical Junction Capacitance (Note 2)	$R_{\theta JA}$	100				pF
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +150				°C

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

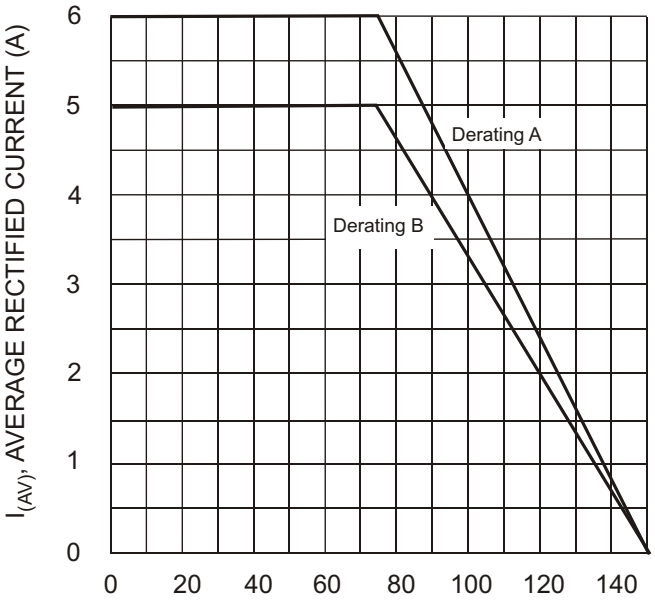
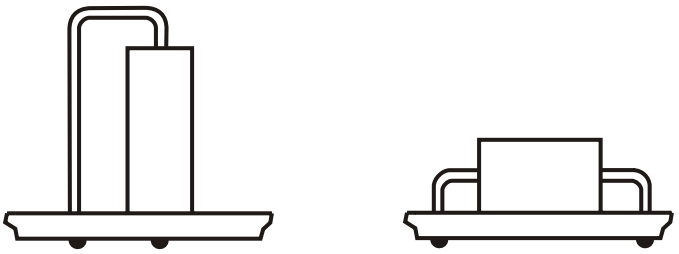


Fig. 1, Forward Current Derating Curve



Ground Plane: 25mm^2 equivalent copper surface area

Fig. 2, Printed Circuit Board Mounting Method

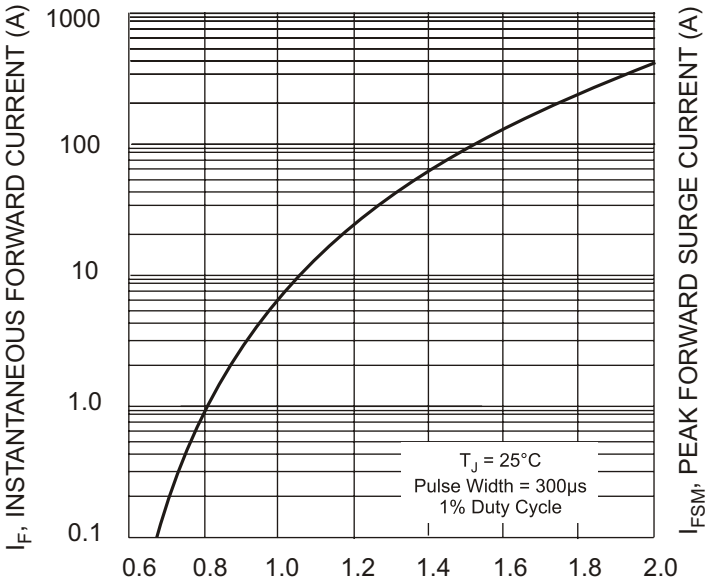


Fig. 3, Typical Forward Characteristics

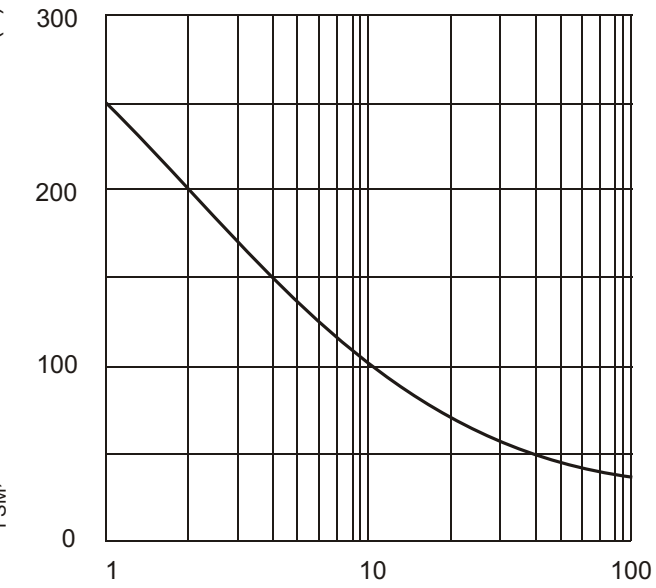


Fig. 4, Peak Surge Current vs Cycles