

# 6 A High Efficiency Rectifiers

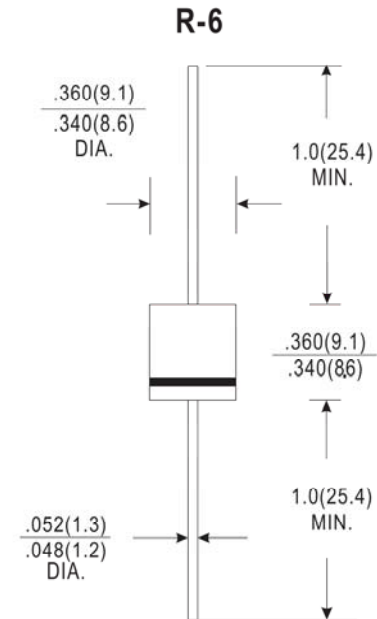
## HER601 THRU HER606 50 to 600 V 6.0 A

### FEATURES

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

### MECHANICAL DATA

- Case: Molded plastic
- Epoxy: UL 94V-O rate flame retardant
- Lead: Axial leads, solderable per MIL- STD-202, Method 208 guaranteed
- Polarity: Color band denotes cathode end
- High temperature soldering guaranteed:  
250°C/10 seconds/.375", (9.5mm) lead lengths at 5 lbs., (2.3kg) tension
- Weight: 2.1 gram



Dimensions in inches and (millimeters)

### Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, Resistive or inductive load. For capacitive load, derate current by 20%

Type Number	Symbols	HER601	HER602	HER603	HER604	HER605	HER606	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	300	400	600	Volts
Maximum RMS Voltage	$V_{RMS}$	35	70	140	210	280	420	Volts
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	300	400	600	Volts
Maximum Average Forward Rectified Current. 375" (9.5mm) Lead Length @ $T_A=55^\circ\text{C}$	$I_{(AV)}$	6.0						Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	200						Amp
Maximum instantaneous Forward Voltage @6.0A	$V_F$	1.0			1.3	1.75		Volts
Maximum Reverse Current @ $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A=100^\circ\text{C}$	$I_R$	10.0 200						uAmp
Maximum Reverse Recovery Time (Note 1)	$T_{RR}$	50					75	nS
Typical Junction Capacitance (Note2)	$C_J$	100					65	pF
Operating Temperature Range	$T_J$	-55 to +150						°C
Storage Temperature Range	$T_{STG}$	-55 to +150						°C

### NOTES:

1. Reverse Recovery Test Conditions:  $I_F=0.5A$ ,  $I_R=1.0A$ ,  $I_{RR}=0.25A$
2. Measured at 1 MHz and Applied Reverse Voltage of 4.0 Volts D.C.

# 6 A High Efficiency Rectifiers

## HER601 THRU HER606 50 to 600 V 6.0 A

### RATINGS AND CHARACTERISTIC CURVES ( HER601 THRU HER606 )

FIG. 1 -REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

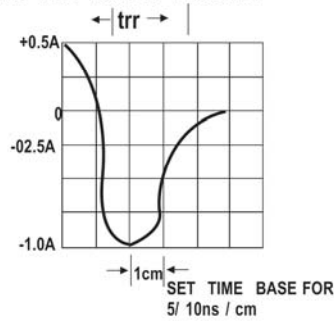
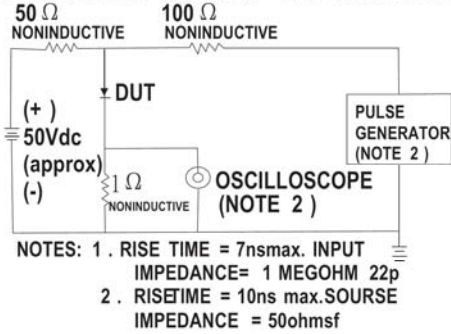


FIG. 2 -MAXIMUM AVERAGE FORWARD CURRENT DERATING

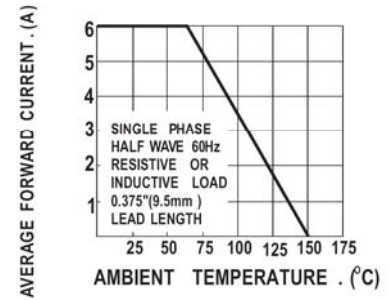


FIG. 3 -TYPICAL REVERSE CHARACTERISTICS

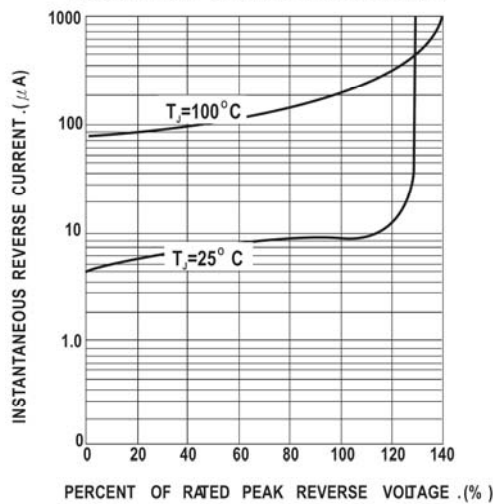


FIG. 5 - TYPICAL REVERSE CHARACTERISTICS

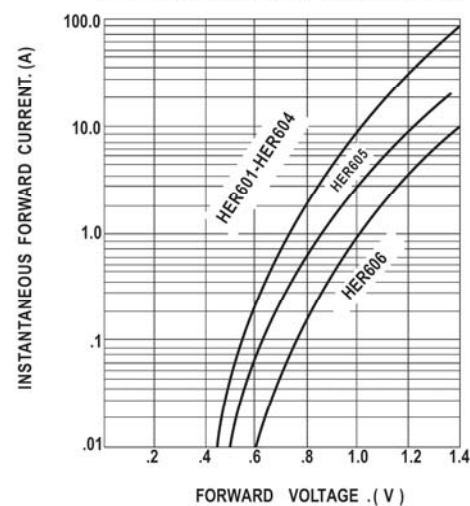


FIG. 4- MAXIMUM NON - REPETITIVE FORWARD SURGE CURRENT

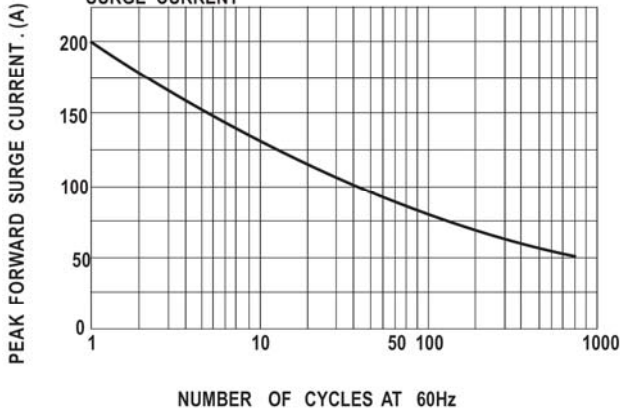


FIG. 6 -TYPICAL JUNCTION CAPACITANCE

