

# HER601 THRU HER608

## HIGH EFFICIENCY RECTIFIERS

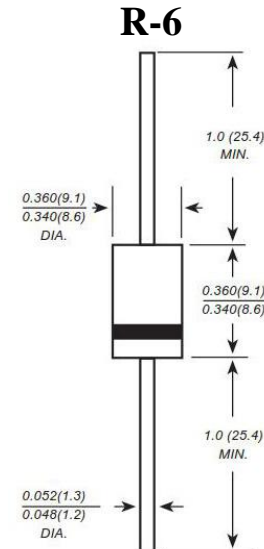
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 6.0 Ampere

### FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0.
- ◆ High speed switching for high efficiency.
- ◆ Low reverse leakage.
- ◆ High forward surge current capability.
- ◆ High temperature soldering guaranteed: 250°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension.

### Mechanical Data

- ◆ Case: R-6 molded plastic body.
- ◆ Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026.
- ◆ Polarity: Color band denotes cathode end.
- ◆ Mounting Position: Any.
- ◆ Weight: 0.072 ounce, 2.05 grams.



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	HER 601	HER 602	HER 603	HER 604	HER 605	HER 606	HER 607	HER 608	UNIT
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	300	400	600	800	1000	VOLTS
Maximum RMS Voltage	$V_{RMS}$	35	70	140	210	280	420	560	700	VOLTS
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	300	400	600	800	1000	VOLTS
Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_A=50^\circ\text{C}$	$I_{(AV)}$	6.0								Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	200.0								Amps
Maximum instantaneous forward voltage at 6.0A	$V_F$	1.0		1.4		1.85			Volts	
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=100^\circ\text{C}$	$I_R$	10 250.0								uA
Maximum reverse recovery time (NOTE 1)	$t_{rr}$	50				100				ns
Typical junction capacitance (NOTE 2)	$C_J$	100.0				65.0				pF
Typical thermal resistance (NOTE 3)	$R_{\theta JC}$	10.0								°C/W
Operating junction and storage temperature range	$T_J, T_{STG}$	-65 to +150								°C

Note: 1. Reverse recovery condition  $I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$

2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

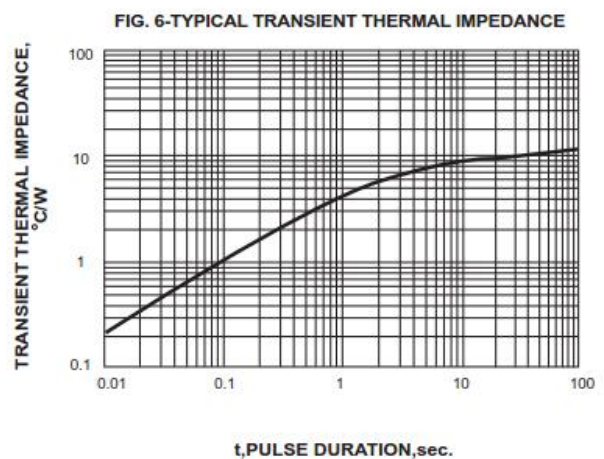
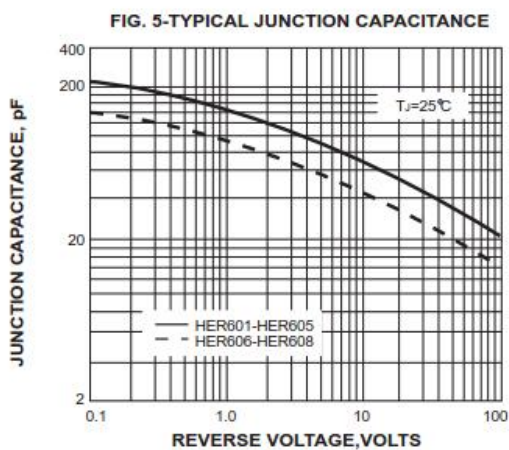
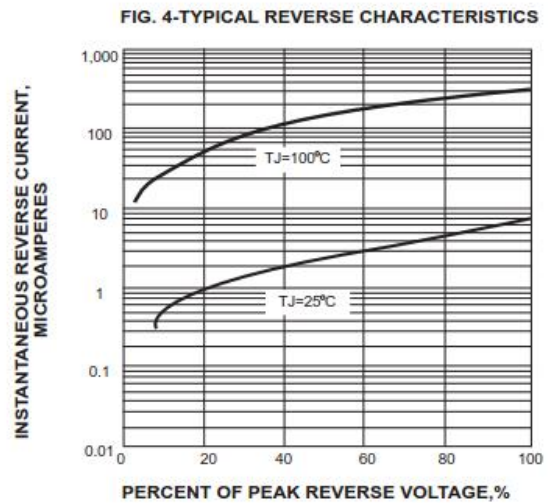
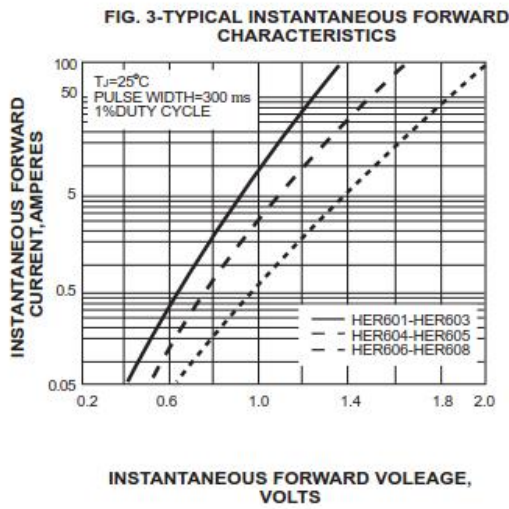
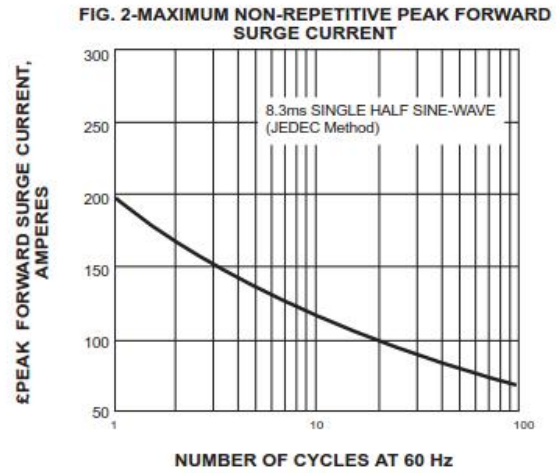
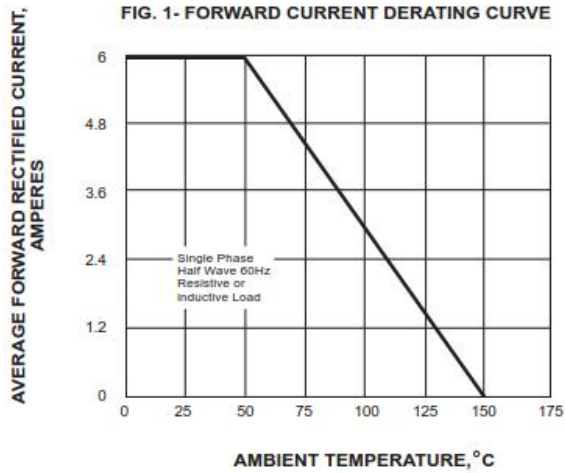
3. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

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### RATING AND CHARACTERISTIC CURVES HER601 THRU HER608



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.