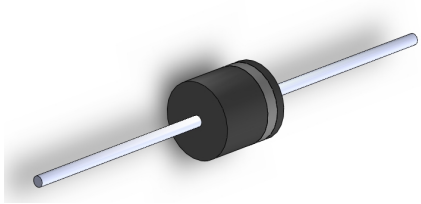
HER601 - HER608

HIGH EFFICIENCY RECTIFIER DIODES

VOLTAGE RANGE: 50 - 1000V
CURRENT: 6.0 A



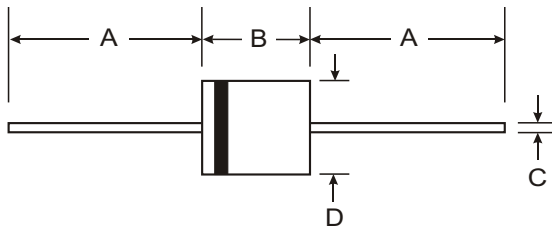
Features

- 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:R-6 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

RoHS COMPLIANT



R-6		
Dim	**Min**	**Max**
A	25.4	—
B	8.6	9.1
C	1.2	1.3
D	8.6	9.1
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	HER 601	HER 602	HER 603	HER 604	HER 605	HER 606	HER 607	HER 608	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	200	300	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	210	280	420	560	700	V
Average Rectified Output Current (Note 1) @T_A = 55°C	I_O	6.0								A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	200								A
Forward Voltage @I_F = 6.0A	V_{FM}	1.0				1.3	1.7			V
Peak Reverse Current @T_A = 25°C At Rated DC Blocking Voltage @T_A = 100°C	I_{RM}	10.0 100								μA
Reverse Recovery Time (Note 2)	t_{rr}	50					75			nS
Typical Junction Capacitance (Note 3)	C_j	100					65			pF
Operating Temperature Range	T_j	-65 to +125								°C
Storage Temperature Range	T_{STG}	-65 to +150								°C

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case
2. Measured with IF = 0.5A, IR = 1.0A, IRR = 0.25A. See figure 5.
3. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

RATINGS AND CHARACTERISTIC CURVES HER601 THRU HER608

FIG. 1- FORWARD CURRENT DERATING CURVE

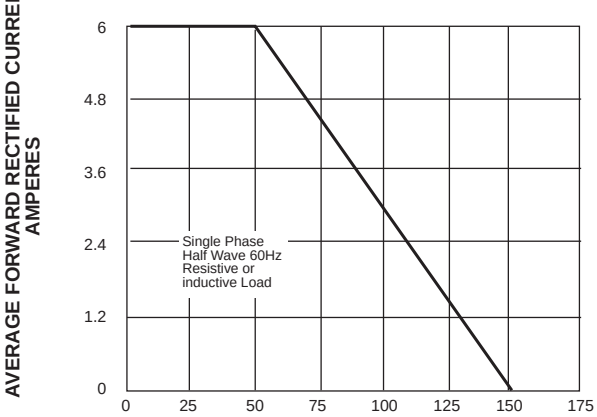


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

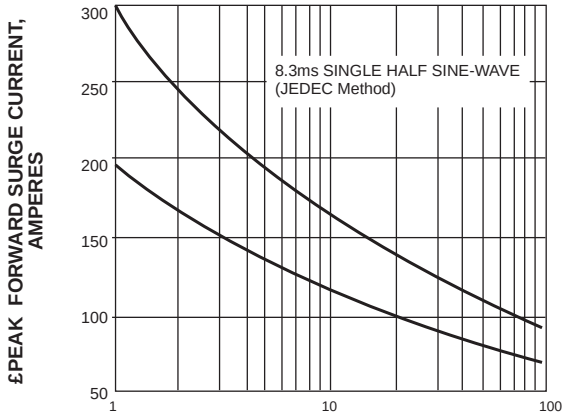


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

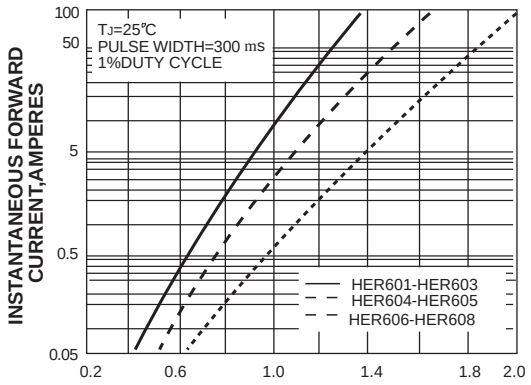


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

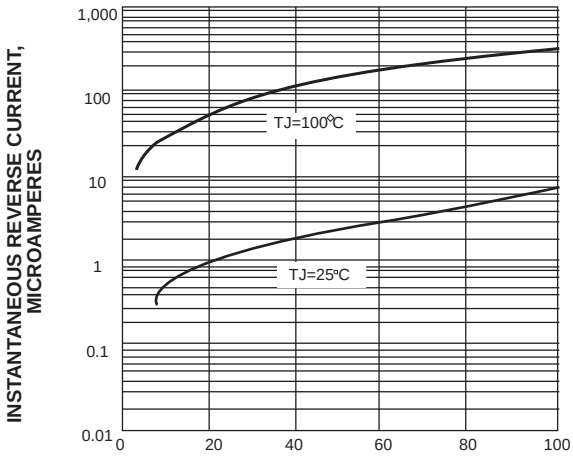


FIG. 5-TYPICAL JUNCTION CAPACITANCE

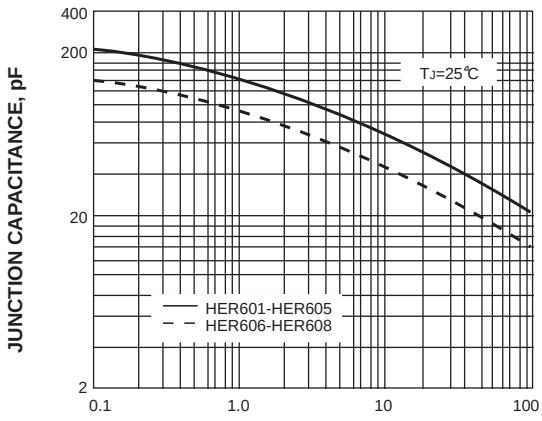


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

