

HER601 ~ HER608 6.0Amp High Efficiency Rectifiers

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

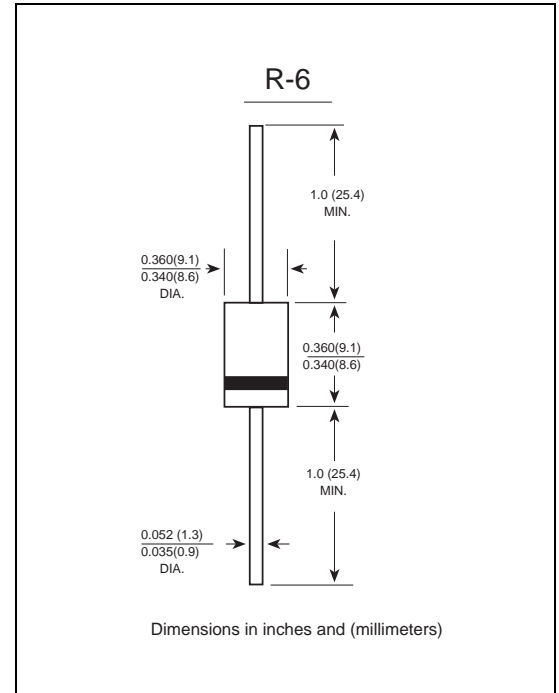
Case: R-6 molded plastic body

Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight : 0.072 ounce, 2.05grams



Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

	SYMBOLS	HER 601	HER 602	HER 603	HER 604	HER 605	HER 606	HER 607	HER 608	UNITS
Maximum repetitive 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				150.0				Amps
Maximum instantaneous forward voltage at 6.0A	V_F	1.0		1.3		1.70				Volts
Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$	I_R	10.0				200.0				μA
Maximum reverse recovery time (NOTE 1)	t_{rr}	50				75				ns
Typical junction capacitance (NOTE 2)	C_J	130				85				pF
Typical thermal resistance (NOTE 3)	$R_{\theta JA}$	30.0								$^\circ\text{C/W}$
Operating junction and storage temperature range	T_J, T_{STG}	-65 to +150								$^\circ\text{C}$

Note: 1. Reverse recovery time test 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