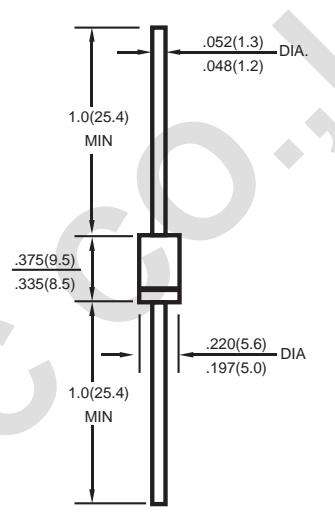


HIGH EFFICIENCY RECTIFIER

<p>FEATURES</p> <ul style="list-style-type: none"> • Low power loss,high efficiency. • Low leakage. • High speed switching. • High current capability. • High surge capability. • High temperature soldering guaranteed: 260°C/10 seconds/0.375" (9.5mm)lead length at 5 lbs (2,3kg) tension <p>MECHANICAL DATA</p> <ul style="list-style-type: none"> • Case: Transfer molded plastic • Epoxy: UL94V-0 rate flame retardant • Polarity: Color band denotes cathode end • Lead: Plated axial lead ,solderable per MIL-STD-202E method 208C • Mounting position: Any • Weight: 0.042 ounce, 1.19 grams 	<p>VOLTAGE RANGE CURRENT</p> <p>50 to 800 Volts 5.0 Amperes</p> <div style="text-align: right;">DO-27</div>  <p style="text-align: center;">Dimensions in inches and (millimeters)</p>
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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 derate current by 20%.

	SYMBOLS	HER 501	HER 502	HER 503	HER 504	HER 505	HER 506	HER 507	UNITS
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	300	400	600	800	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	210	280	420	560	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	300	400	600	800	Volts
Maximum Average Forward Rectified Current 0.375" (9.5mm) lead length at $T_A=50^\circ C$	$I_{(AV)}$	5.0							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	200				150			Amps
Maximum Instantaneous Forward Voltage Drop at 5.0A	V_F	1.0		1.3		1.5	1.7		Volts
Maximum DC Reverse Current at rated DC blocking voltage $T_A=25^\circ C$	I_R	10							μA
Maximum Full Load Reverse Curren, full cycle average 0.375" (9.5mm) lead length at $T_L=55^\circ C$	$I_{R(AV)}$	150							μA
Maximum Reverse Recovery Time(NOTE 1)	t_{rr}	50				70			nS
Typical Junction Capacitance(NOTE2)	C_J	70				50			pF
Typical Thermal Resistance(NOTE3).	$R_{\theta JA}$	20							$^\circ C/W$
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +150							$^\circ C$

NOTES:

1. Test condition: $I_F=0.5A, I_R=1.0A, I_{RR}=0.25A$.
2. Measured at 1MHz and applied reverse of 4.0volts.
3. Thermal resistance from junction to ambient with 0.375" (9.5mm) lead length, P.C.B. mounted.