



ER504A THRU ER606H

SUPER FAST RECTIFIERS

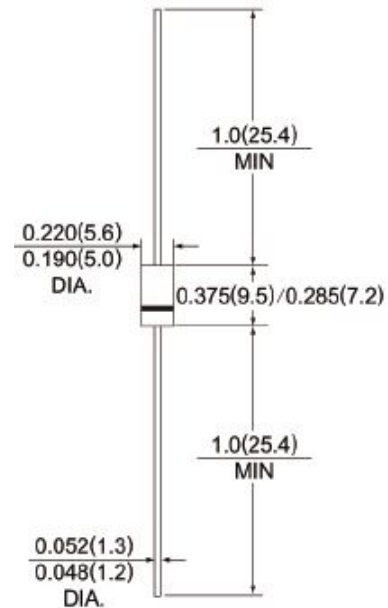
Reverse Voltage 400 to 600 Volts

Forward Current 5.0-6.0 Ampere

Features:

1. Super fast switching time for high efficiency
2. Low forward voltage drop and high current capability
3. Low reverse leakage current
4. Plastic material has UL flammability classification 94V-0

DO-201AD/ DO-27



Mechanical Data:

1. Case: JEDEC DO-27 molded plastic
2. Polarity: Color band denotes cathode
3. Weight: 0.04 ounces , 1.1 grams
4. Mounting position: Any

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%

	Symbols	ER504A	ER506	ER506H	ER604	ER606	ER606H	ER607	Units
Maximum repetitive peak reverse voltage	V_{RMM}	400	500	550	400	500	550	600	Volts
Maximum DC blocking voltage	V_{DC}	400	500	550	400	500	550	600	Volts
Maximum Average Forward Rectified Current @TA=55 °C	$I_{(AV)}$	5.0			6.0				Amps
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)	I_{FSM}	150.0							Amps
Maximum forward voltage at 5.0A DC	V_F	1.30	1.40	1.45	1.30	1.40	1.45	1.70	Volts
Maximum DC reverse current $T_J=25^\circ\text{C}$ at rated DC blocking voltage $T_J=100^\circ\text{C}$	I_R	5.0 100							μA
Maximum Reverse Recovery Time(Note 1)	T_{rr}	35.0							ns
Typical junction capacitance (Note 2)	C_J	45.0							pF
Typical thermal resistance (Note 3)	$R_{\theta JA}$	25.0							$^\circ\text{C}/\text{W}$
Operating Temperature Range	T_J	-55 to +125							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150							$^\circ\text{C}$

Notes:

1. Measured with $I_F=0.5\text{A}$, $I_R=1\text{A}$, $IRR=0.25\text{A}$.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.
3. Thermal resistance junction to ambient