

# ER504

## ULTRAFAST EFFICIENT GLASS PASSIVATED RECTIFIER

VOLTAGE: 400V

CURRENT: 5.0A

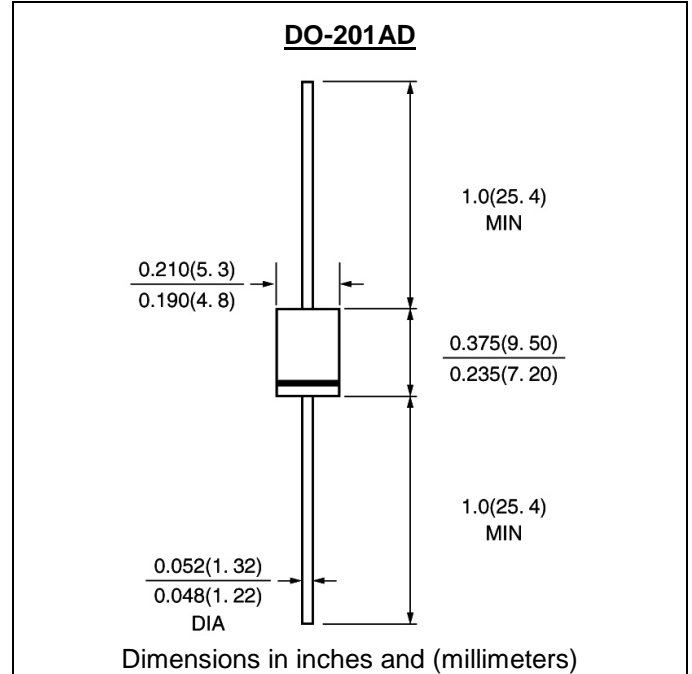


### FEATURE

Low power loss  
High surge capability  
Ultra-fast recovery time for high efficiency  
Glass passivated chip junction  
High temperature soldering guaranteed  
250°C/10sec/0.375"lead length at 5 lbs tension

### MECHANICAL DATA

Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C  
Case: Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy  
Polarity: color band denotes cathode  
Mounting position: any



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half -wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	SYMBOL	ER504	units
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	400	V
Maximum RMS Voltage	V <sub>rms</sub>	280	V
Maximum DC blocking Voltage	V <sub>dc</sub>	400	V
Maximum Average Forward Rectified Current 3/8"lead length at T <sub>a</sub> =55°C	I <sub>f(av)</sub>	5.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>fsm</sub>	150.0	A
Maximum Forward Voltage at Forward current 5A Peak	V <sub>f</sub>	1.25	V
Maximum DC Reverse Current T <sub>a</sub> =25°C at rated DC blocking voltage T <sub>a</sub> =125°C	I <sub>r</sub>	10.0 100.0	μA μA
Maximum Reverse Recovery Time (Note 1)	T <sub>rr</sub>	35	nS
Typical Junction Capacitance (Note 2)	C <sub>j</sub>	65	pF
Storage and Operating Junction Temperature	T <sub>stg</sub> , T <sub>j</sub>	-55 to +150	°C

#### Note:

1. Reverse Recovery Condition I<sub>f</sub> =0.5A, I<sub>r</sub> =1.0A, I<sub>rr</sub> =0.25A
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc

## RATINGS AND CHARACTERISTIC CURVES ER504

FIG.1- FORWARD CURRENT DERATING CURVE

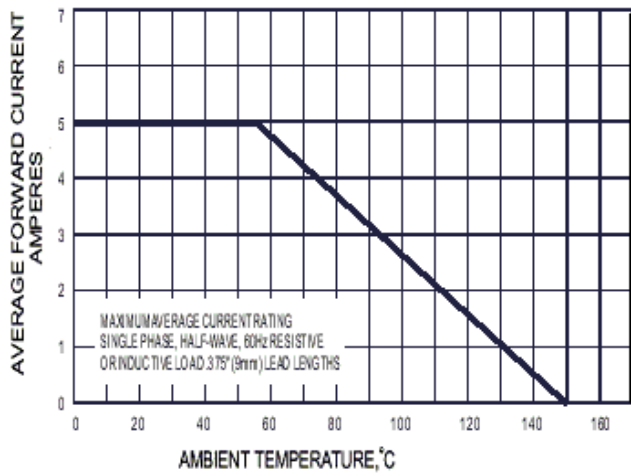


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

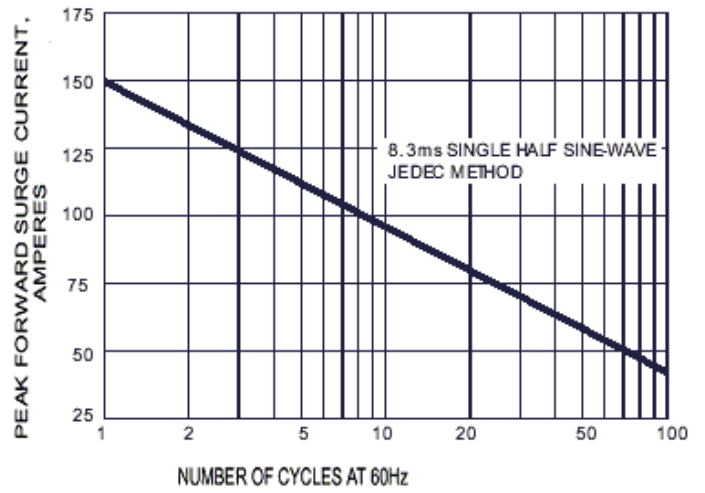


FIG.3- TYPICAL REVERSE LEAKAGE CHARACTERISTICS

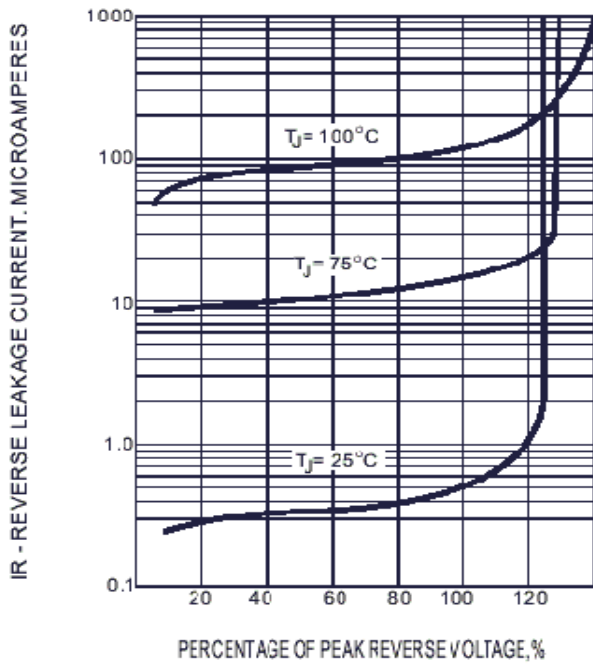


FIG.4- TYPICAL FORWARD CHARACTERISTICS

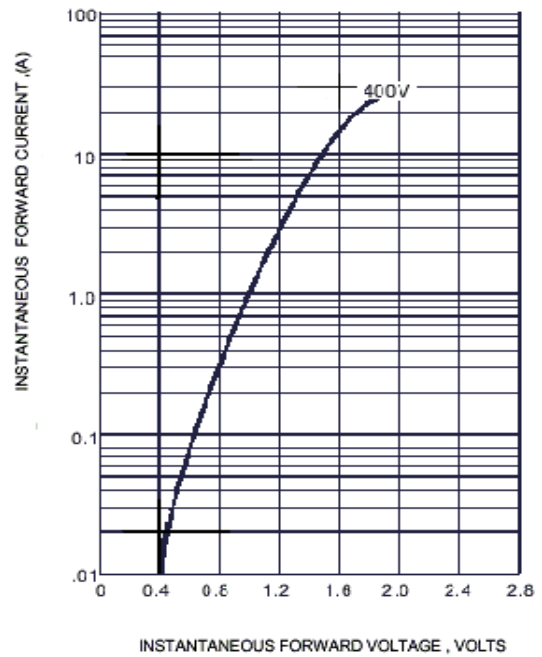


FIG.5- TYPICAL JUNCTION CAPACITANCE

