



ER504-LE

SUPERFAST RECOVERY RECTIFIERS

Voltage

400 V

Current

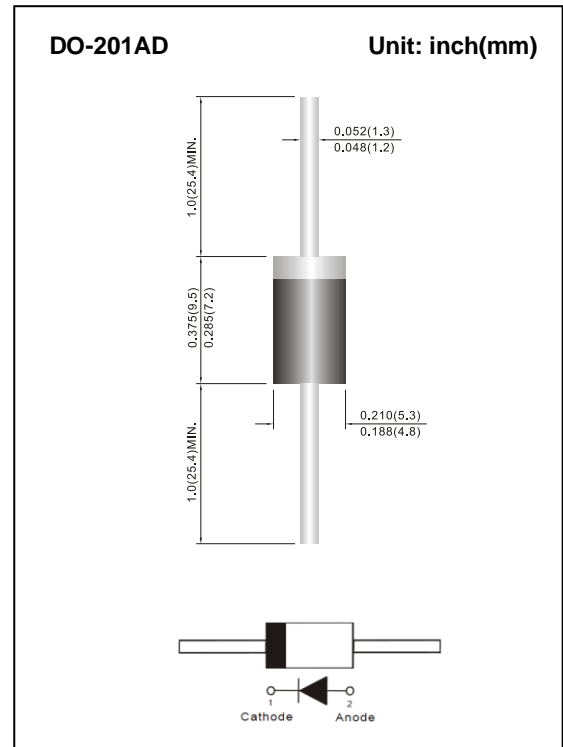
5 A

Features

- Superfast recovery times-epitaxial construction
- Low forward voltage, high current capability
- Hermetically sealed.
- Low leakage
- High surge capacity
- Plastic package has Underwriters Laboratory
Flammability Classification 94V-O utilizing
Flame Retardant Epoxy Molding Compound
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. (Halogen Free)

Mechanical Data

- Case: Molded plastic, DO-201AD
- Terminals: Axial leads, solderable per MIL-STD-750, Method 2026
- Polarity : Color band denotes cathode end
- Approx. Weight: 0.04 ounces, 1.142 grams



Maximum Ratings ($T_A=25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	400	V
Maximum rms voltage	V_{RMS}	280	V
Maximum dc blocking voltage	V_R	400	V
Maximum average forward current	$I_{F(AV)}$	5	A
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	150	A
Maximum forward voltage at 5A	V_F	1.3	V
Maximum dc reverse current at rated dc blocking voltage	I_R	5	μA
Typical junction capacitance Measured at 1MHZ and applied $V_R=4\text{V}$	C_J	60	pF
Typical thermal resistance (Note 1)	$R_{\theta JC}$	10	$^\circ\text{C/W}$
Maximum reverse recovery time (Note 2)	T_{RR}	35	ns
Operating and storage temperature range	T_J, T_{STG}	-55 to +150	$^\circ\text{C}$

Note : 1. Mounted on a FR4 PCB, single-sided copper, with 100cm² copper pad area
2. Reverse Recovery Test Conditions : $I_F=0.5\text{A}$, $I_R=-1\text{A}$, Recover to -0.25A



ER504-LE

TYPICAL CHARACTERISTIC CURVES

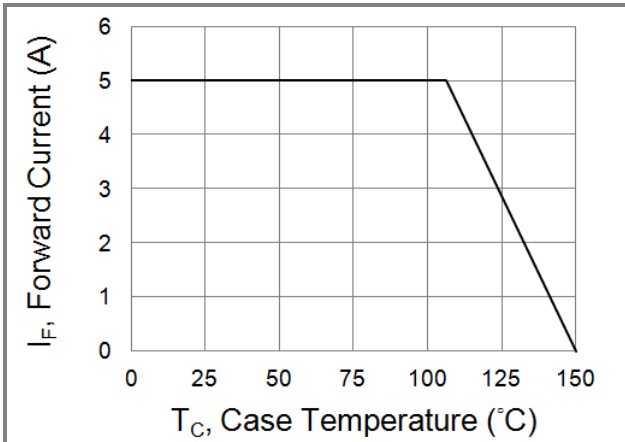


Fig.1 Forward Current Derating Curve

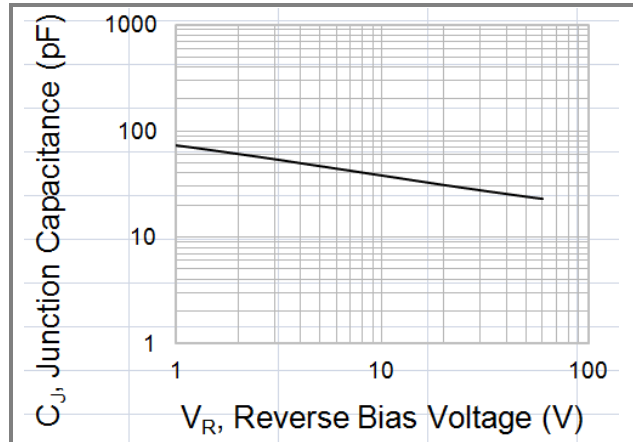


Fig.2 Typical Junction Capacitance

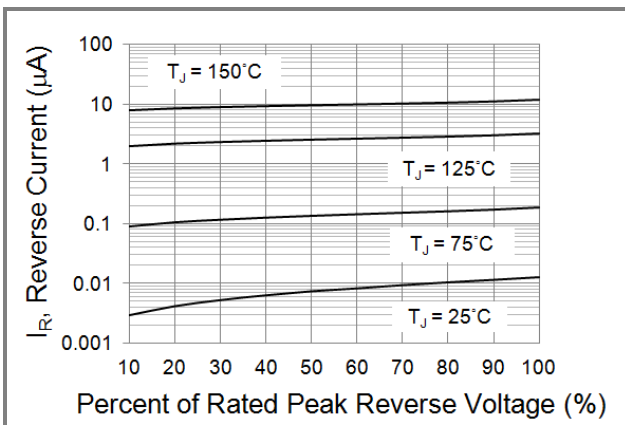


Fig.3 Typical Reverse Characteristics

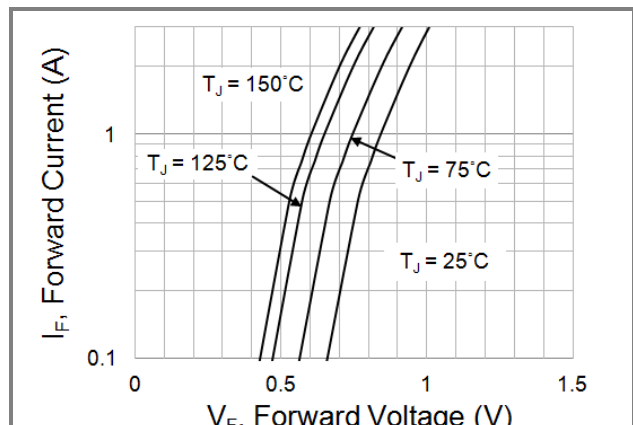


Fig.4 Typical Forward Characteristics

Part No Packing Code Version

Part No Packing Code	Package Type	Packing Type	Marking	Version
ER504-LE_AY_00001	DO-201AD	1.25K pcs / box	LER504	Halogen free
ER504-LE_B0_00001	DO-201AD	0.5K pcs / box	LER504	Halogen free
ER504-LE_R2_00001	DO-201AD	1.25K pcs / 13" reel	LER504	Halogen free



ER504-LE

Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.