

# ED502S~ED506S

## SUPERFAST RECOVERY RECTIFIERS

**VOLTAGE** 200 to 600 Volts **CURRENT** 5.0 Amperes

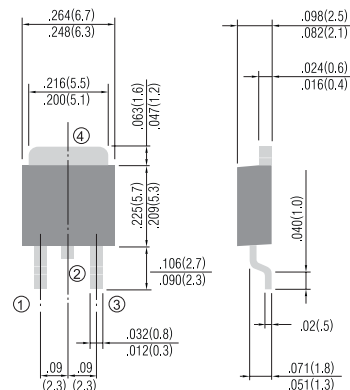
### FEATURES

- Superfast recovery times-epitaxial construction.
- Low forward voltage, high current capability.
- Exceeds environmental standards of MIL-S-19500/228.
- Hermetically sealed.
- Low leakage.
- High surge capability.
- Plastic package has Underwriters Laboratories Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Lead free in comply with EU RoHS 2002/95/EC directives

### MECHANICAL DATA

- Case: Molded plastic, TO-252 / DPAK
- Terminals: Axial leads, solderable to MIL-STD-750, Method 2026
- Polarity: As marking
- Weight: 0.0104 ounces, 0.297 grams.

TO-252 Unit: inch ( mm )



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.  
Resistive or inductive load, 60Hz.

PARAMETER	SYMBOL	ED502S	ED503S	ED504S	ED506S	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	200	300	400	600	V
Maximum RMS Voltage	V <sub>RMS</sub>	140	210	280	420	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	200	300	400	600	V
Maximum Average Forward Current at T <sub>A</sub> =75°C	I <sub>F(AV)</sub>	5.0				A
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I <sub>FSM</sub>	75				A
Maximum Forward Voltage at 5.0A DC	V <sub>F</sub>	0.95	1.25		1.70	V
Maximum DC Reverse Current at T <sub>J</sub> =25°C Rated DC Blocking Voltage T <sub>J</sub> =125°C	I <sub>R</sub>	1.0 300				μA
Maximum Reverse Recovery Time	t <sub>rr</sub>	35				nS
Typical Junction capacitance	C <sub>J</sub>	45				pF
Typical Thermal Resistance	R <sub>θJA</sub>	9.0				°C / W
Operating Junction and Storage Temperature Range	T <sub>J</sub> ,T <sub>STG</sub>	-55 to +150				°C

### NOTES:

1. Thermal Resistance Junction to Ambient .

## ED502S~ED506S

### RATING AND CHARACTERISTIC CURVES

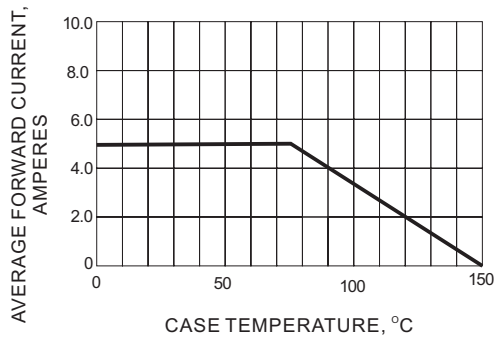


Fig.1-FORWARD CURRENT DERATING CURVE

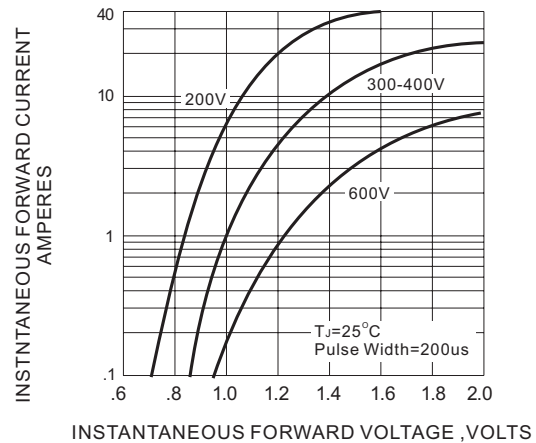


Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

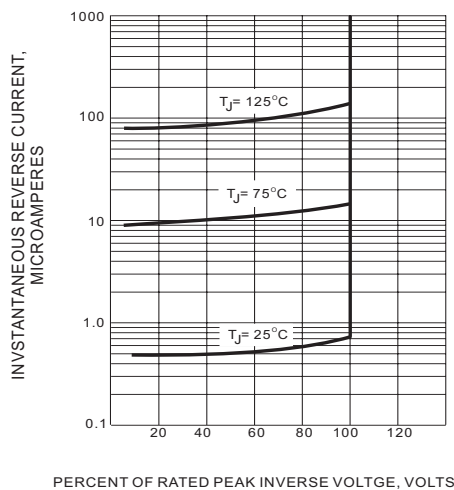


Fig.3-TYPICAL REVERSE CHARACTERISTICS

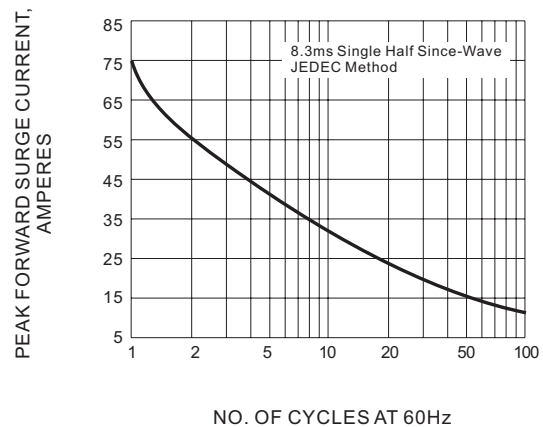


Fig.4-MAXIMUM NON-REPETITIVE SURGE CURRENT

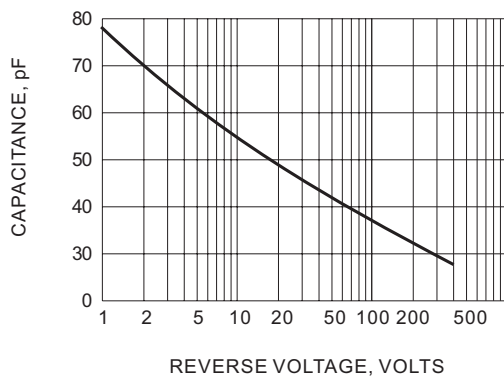
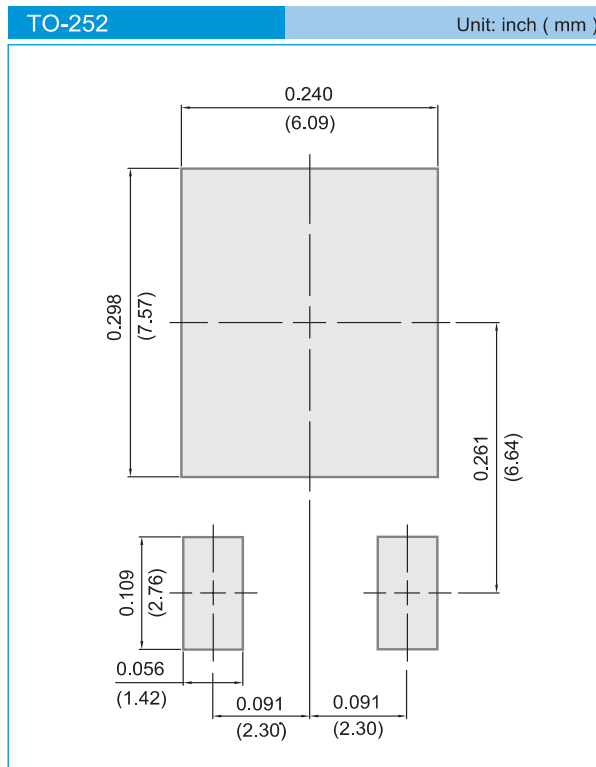


Fig.5-TYPICAL JUNCTION CAPACITANCE

## ED502S~ED506S

### MOUNTING PAD LAYOUT



### ORDER INFORMATION

- Packing information  
T/R - 3K per 13" plastic Reel



## ED502S~ED506S

For example :

RB500V-40\_R2\_00001



Packing Code <b>XX</b>				Version Code <b>XXXXX</b>		
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code
T/B	<b>A</b>	N/A	<b>0</b>	HF	<b>0</b>	serial number
T/R	<b>R</b>	7"	<b>1</b>	RoHS	<b>1</b>	serial number
B/P	<b>B</b>	13"	<b>2</b>			
T/P	<b>T</b>	26mm	<b>X</b>			
TRR	<b>S</b>	52mm	<b>Y</b>			
TRL	<b>L</b>	PBCU	<b>U</b>			
FORMING	<b>F</b>	PBCD	<b>D</b>			

Part No\_packing code\_Version

ED502S\_L2\_00001

ED502S\_L2\_10001

ED502S\_S2\_00001

ED502S\_S2\_10001



## ED502S~ED506S

### 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.