



# ED502T~ED506T

## SUPERFAST RECOVERY RECTIFIERS

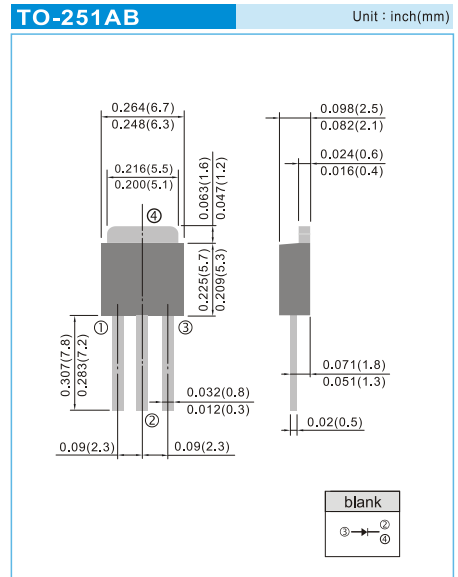
**VOLTAGE** 200 to 600 Volt **CURRENT** 5.0 Ampere

### FEATURES

- Superfast recovery times-epitaxial construction.
- Low forward voltage, high current capability.
- 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 compliance with EU RoHS 2.0

### MECHANICAL DATA

- Case: Molded plastic, TO-251AB
- Terminals: Axial leads, solderable to MIL-STD-750, Method 2026
- Polarity: As marking
- Weight: 0.0104 ounces, 0.297 grams.



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	ED502T	ED503T	ED504T	ED506T	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	200	300	400	600	V
Maximum RMS Voltage	$V_{RMS}$	140	210	280	420	V
Maximum DC Blocking Voltage	$V_{DC}$	200	300	400	600	V
Maximum Average Forward Current at $T_A = 75^\circ\text{C}$	$I_{F(AV)}$	5.0				A
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	75				A
Maximum Forward Voltage at 5.0A DC	$V_F$	0.95	1.25		1.70	V
Maximum DC Reverse Current at $T_j = 25^\circ\text{C}$ Rated DC Blocking Voltage $T_j = 125^\circ\text{C}$	$I_R$	1.0			300	$\infty$ A
Maximum Reverse Recovery Time	$t_{rr}$	35				nS
Typical Junction capacitance	$C_J$	45				pF
Typical Thermal Resistance	$R_{\theta JA}$	9.0				$^\circ\text{C} / \text{W}$
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150				$^\circ\text{C}$

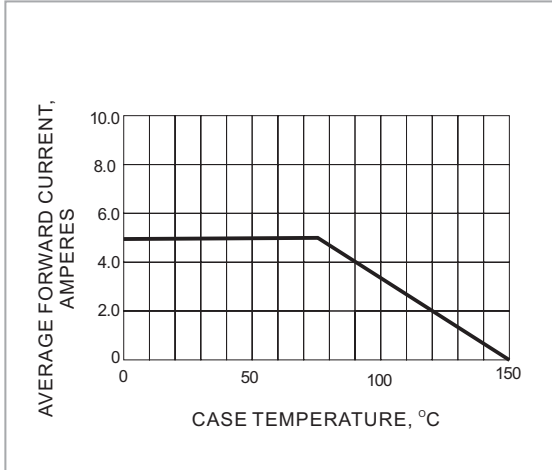
#### NOTES:

1. Thermal Resistance Junction to Ambient .

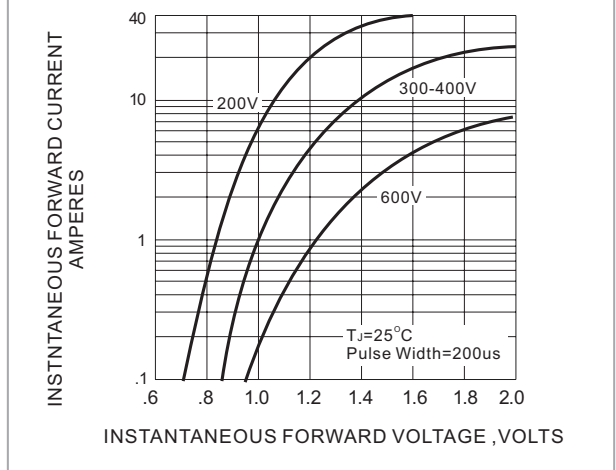


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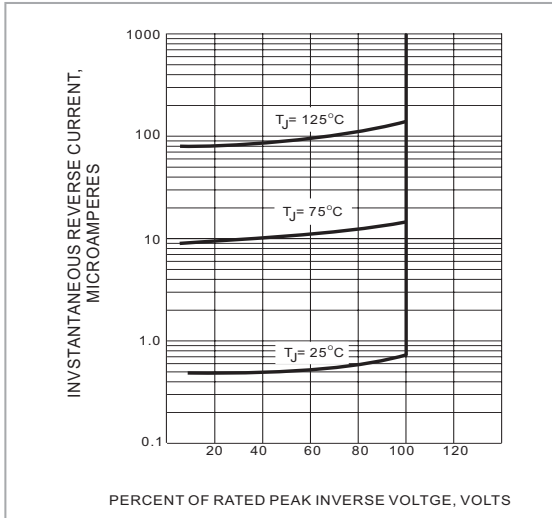
## RATING AND CHARACTERISTIC CURVES



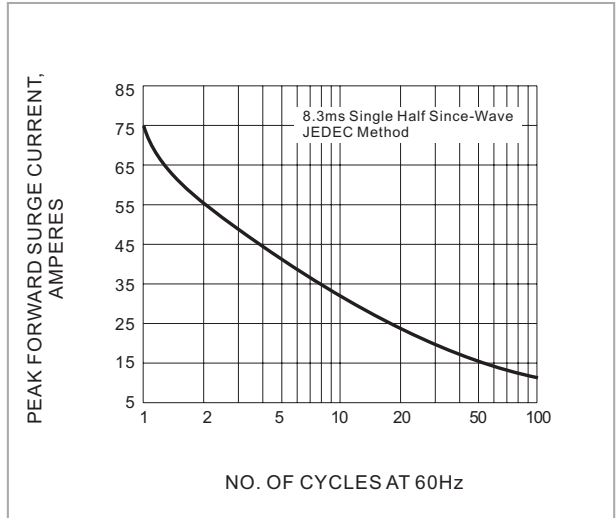
**Fig. 1-FORWARD CURRENT DERATING CURVE**



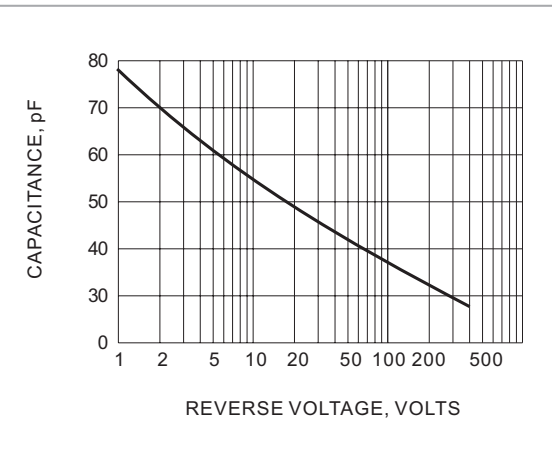
**Fig. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC**



**Fig. 3-TYPICAL REVERSE CHARACTERISTICS**



**Fig. 4-MAXIMUM NON-REPETITIVE SURGE CURRENT**



**Fig. 5-TYPICAL JUNCTION CAPACITANCE**



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### Part No\_packing code\_Version

ED502T\_TO\_00001

ED502T\_TO\_10001

For example :

**RB500V-40\_R2\_00001**



Packing type	Packing Code <b>XX</b>			Version Code <b>XXXXX</b>		
	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
Tape and Ammunition Box (T/B)	<b>A</b>	N/A	<b>0</b>	<b>HF</b>	<b>0</b>	serial number
Tape and Reel (T/R)	<b>R</b>	7"	<b>1</b>	<b>RoHS</b>	<b>1</b>	serial number
Bulk Packing (B/P)	<b>B</b>	13"	<b>2</b>			
Tube Packing (T/P)	<b>T</b>	26mm	<b>X</b>			
Tape and Reel (Right Oriented) (TRR)	<b>S</b>	52mm	<b>Y</b>			
Tape and Reel (Left Oriented) (TRL)	<b>L</b>	PANASERT T/B CATHODE UP (PBCU)	<b>U</b>			
FORMING	<b>F</b>	PANASERT T/B CATHODE DOWN (PBCD)	<b>D</b>			



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