



# ED502YT~ED506YT

## SUPERFAST RECOVERY RECTIFIERS

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

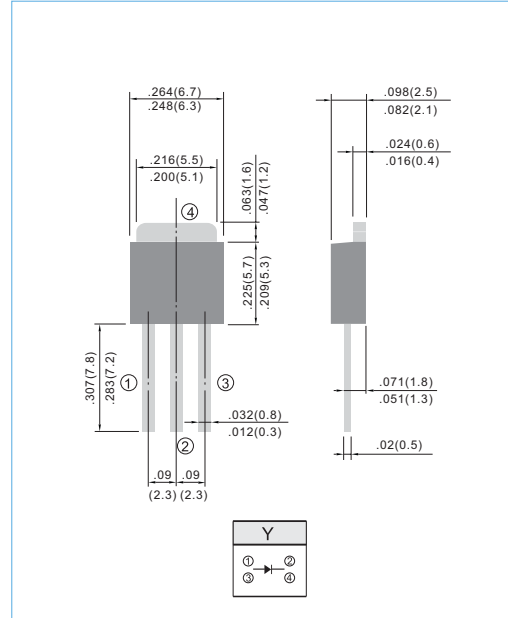
### FEATURES

- 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.
- In compliance with EU RoHS 2002/95/EC directives

### 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.

TO-251AB Unit : inch (mm)



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	ED502YT	ED503YT	ED504YT	ED506YT	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(JEDEC method)	$I_{FSM}$	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	$\mu\text{A}$
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				$^\circ\text{C}$

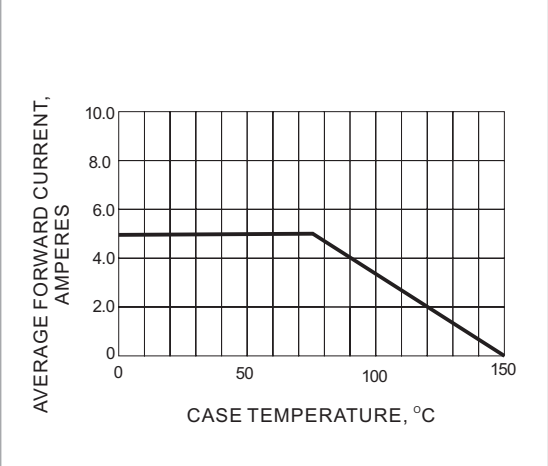
#### NOTES:

1. Thermal Resistance Junction to Ambient .

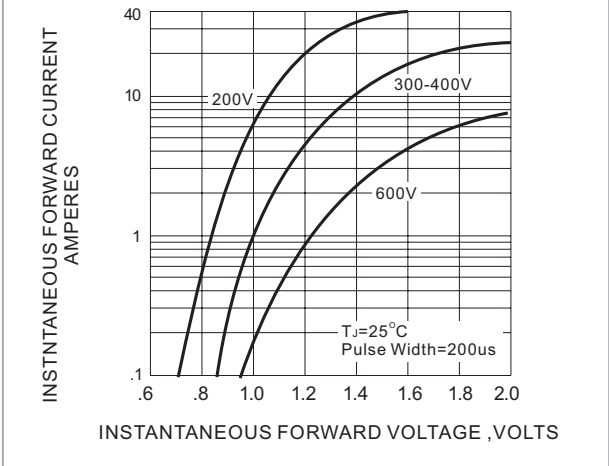


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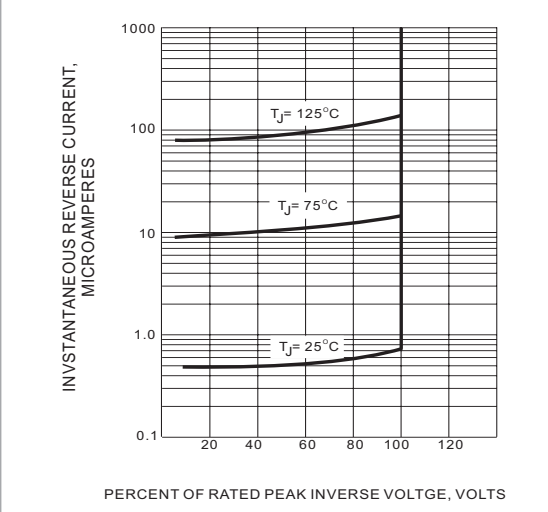
## RATING AND CHARACTERISTIC CURVES



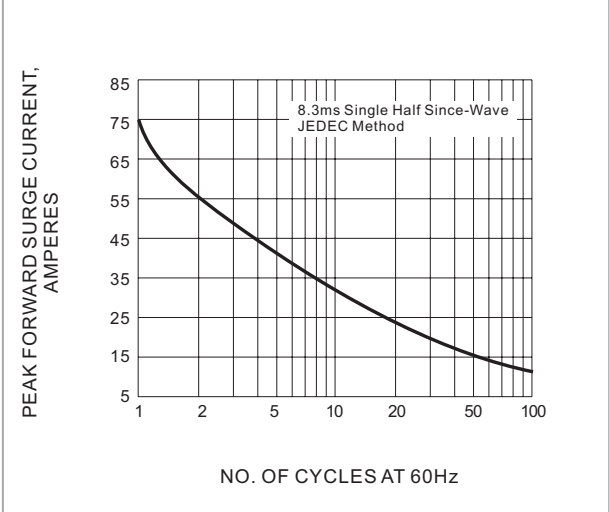
**Fig. 1-FORWARD CURRENT DERATING CURVE**



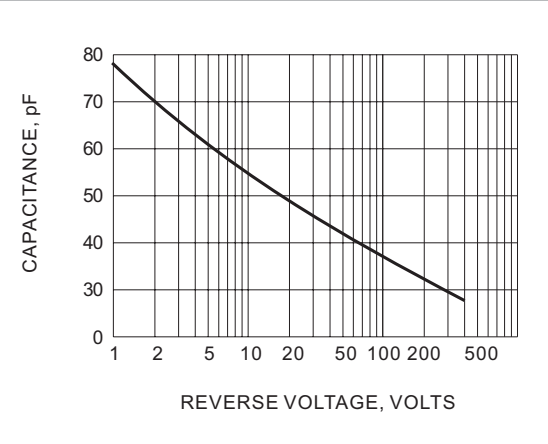
**Fig. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC**



**Fig. 3-TYPICAL REVERSE CHARACTERISTICS**



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



**Fig. 5-TYPICAL JUNCTION CAPACITANCE**

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