

ED502YT~ED506YT

SUPERFAST RECOVERY RECTIFIERS

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

FEATURES

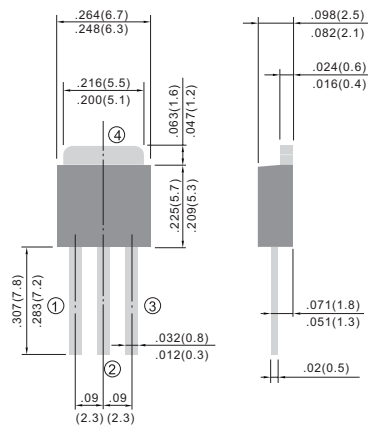
- Superfast recovery times-epitaxial construction.
- Low forward voltage, high current capability.
- Exceeds environmental standards of MIL-S-19500/228.
- Hermetically sealed.
- Low leakage.
- High surge capability.
- Plastic package has Underwriters Laboratories Flammability Classification 94V-O utilizing 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				μA
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 .

ED502YT~ED506YT

RATING AND CHARACTERISTIC CURVES

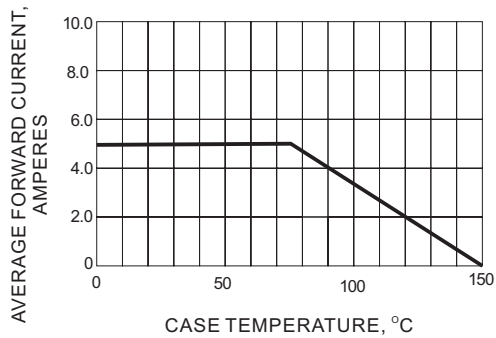


Fig.1-FORWARD CURRENT DERATING CURVE

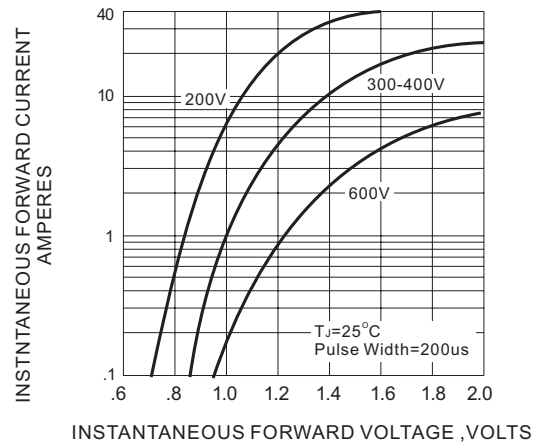


Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

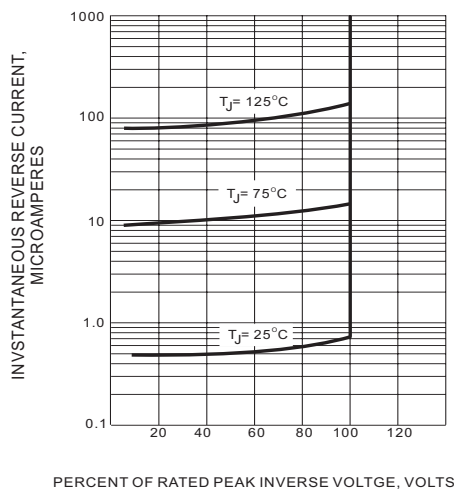


Fig.3-TYPICAL REVERSE CHARACTERISTICS

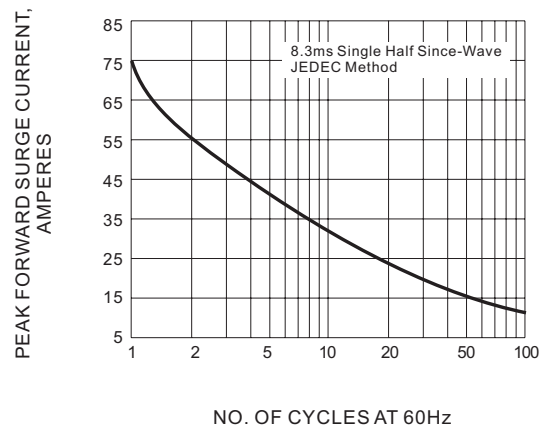


Fig.4-MAXIMUM NON-REPETITIVE SURGE CURRENT

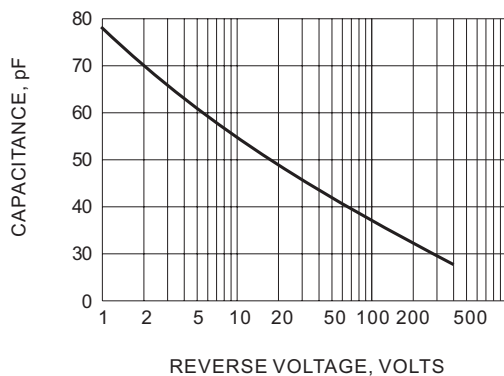


Fig.5-TYPICAL JUNCTION CAPACITANCE