

ED302T Thru ED306T

SUPER FAST RECOVERY RECTIFIER
VOLTAGE - 200 to 600 Volts CURRENT - 3.0 Amperes

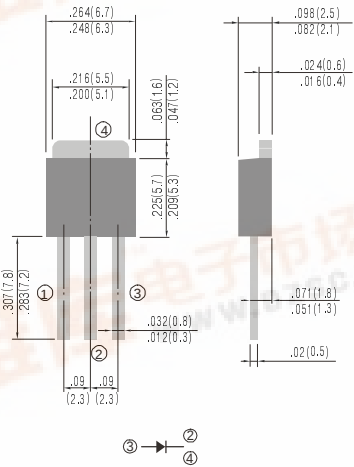
FEATURES

- For thorough hole applications
- Low profile package
- Built-in strain relief
- Easy pick and place
- Superfast recovery times for high efficiency
- Plastic package has Underwriters Laboratory
Flammability Classification 94V-O
- Glass passivated junction
- High temperature soldering:
260°C / 10 seconds at terminals

MECHANICAL DATA

Case: TO-251 molded plastic
Terminals: Solder plated, solderable per MIL-STD-750,Method 2026
Polarity: Color band denotes cathode
Weight: 0.015 ounce, 0.4 gram.

TO-251AB



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOLS	ED302T	ED303T	ED304T	ED306T	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	200	300	400	600	Volts
Maximum RMS Voltage	V _{RMS}	140	210	280	480	Volts
Maximum DC Blocking Voltage	V _{DC}	200	300	400	600	Volts
Maximum Average Forward Rectified Current at T _c =75°C	I _{AV}	3.0	3.0	3.0	3.0	Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I _{FSM}	60	60	60	60	Amps
Maximum Instantaneous Forward Voltage at 3.0A (Note 1)	V _F	0.95	1.25	1.25	1.70	Volts
Maximum DC Reverse Current (Note 1)T _A =25°C at Rated DC Blocking Voltage T _A =100°C	I _R	5.0 50	5.0 50	5.0 50	5.0 50	μA
Maximum Thermal Resistance (Note 2)	R _{θJC} R _{θJA}	6 80	6 80	6 80	6 80	°C / W
Maximum Reverse Recovery	T _{RR}	35	35	35	35	ns
Storage Temperature Range	T _{STG}	-55 to +150				°C

NOTES

1. Pulse test with PW=300μsec, 2% Duty Cycle.
2. Mounted on P.C. Board with 14mm² (.013mm thick) copper pad areas.

RATING AND CHARACTERISTIC CURVES

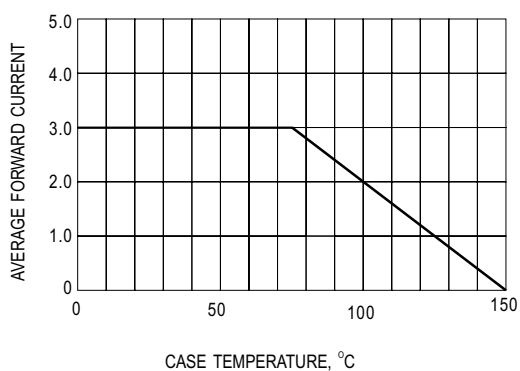


Fig.1- FORWARD CURRENT DERATING CURVE

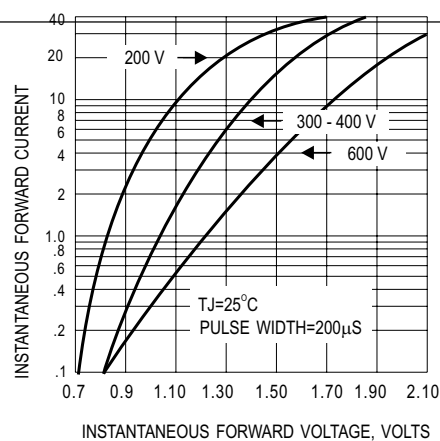


Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

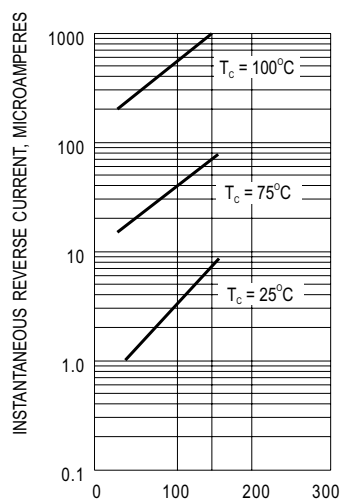


Fig.3- TYPICAL REVERSE CHARACTERISTIC

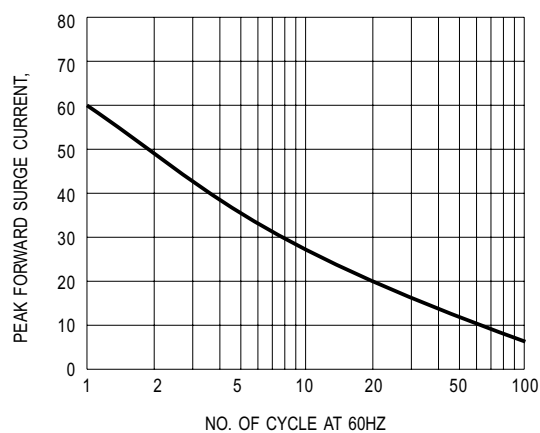


Fig.4- MAXIMUM NON-REPETITIVE SURGE CURRENT

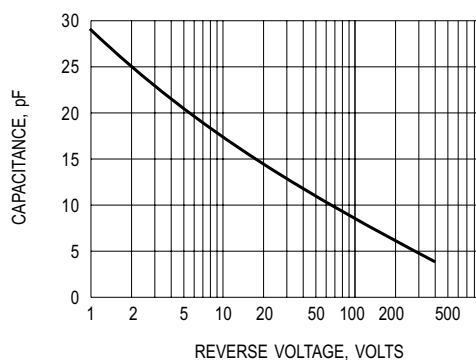


Fig.5- TYPICAL JUNCTION CAPACITANCE