

# ED1002CT Thru ED1006CT

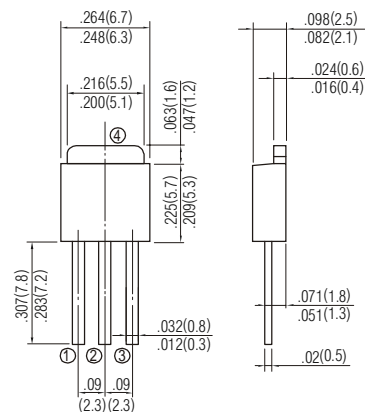
## SUPER FAST RECOVERY RECTIFIER

VOLTAGE - 200 to 600 Volts CURRENT - 10.0 Amperes

### FEATURES

- For through 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

### TO-251AB



### MECHANICAL DATA

Case: TO-251AB molded plastic

Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode

Weight: 0.015 ounce, 0.4 gram.

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

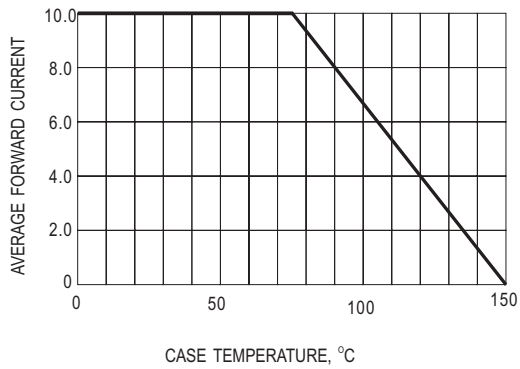
Resistive or inductive load.

	SYMBOLS	ED1002CT	ED1003CT	ED1004CT	ED1006CT	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	200	300	400	600	Volts
Maximum RMS Voltage	$V_{RMS}$	140	210	280	420	Volts
Maximum DC Blocking Voltage	$V_{DC}$	200	300	400	600	Volts
Maximum Average Forward Rectified Current at $T_C=75^\circ C$	$I_{(AV)}$	10	10	10	10	Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	$I_{FSM}$	75	75	75	75	Amps
Maximum Instantaneous Forward Voltage at 5.0A (Note 1)	$V_F$	0.95	1.30	1.30	1.70	Volts
Maximum DC Reverse Current (Note 1) $T_A=25^\circ C$ at Rated DC Blocking Voltage $T_A=100^\circ C$	$I_R$	5.0 50	5.0 50	5.0 50	5.0 50	$\mu A$
Maximum Thermal Resistance (Note 2)	$R_{\theta JC}$ $R_{\theta JA}$	11 80	11 80	11 80	11 80	$^\circ C / W$
Maximum Reverse Recovery	$T_{RR}$	35	35	35	35	ns
Storage Temperature Range	$T_{STG}$	-55 to +150				$^\circ C$

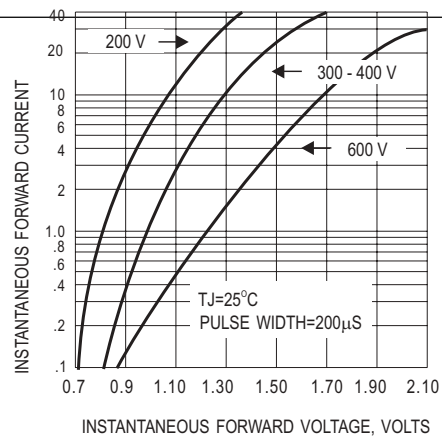
#### NOTES:

1. Pulse Test with  $PW=300\mu sec$ , 2% Duty Cycle.
2. Mounted on P.C. Board with  $14mm^2$  (.013mm thick) copper pad areas.

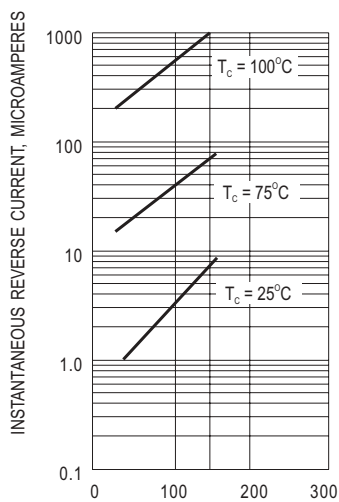
**RATING AND CHARACTERISTIC CURVES**



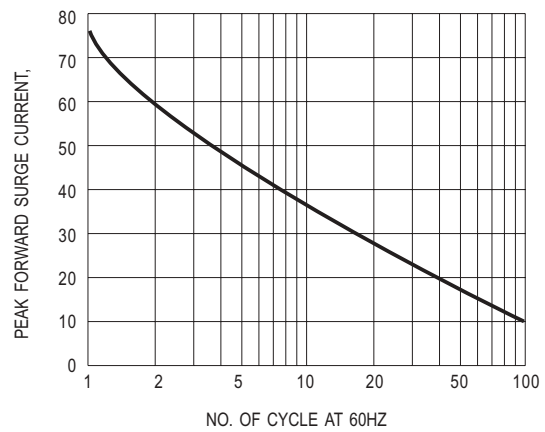
**Fig.1- FORWARD CURRENT DERATING CURVE**



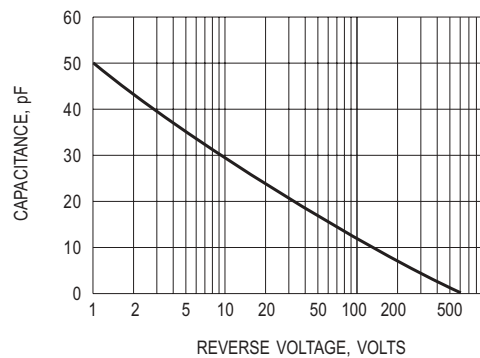
**Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC**



**Fig.3- TYPICAL REVERSE CHARACTERISTIC**



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



**Fig.5- TYPICAL JUNCTION CAPACITANCE**