



DATA SHEET

ED1002CT~ED1006CT

SURFACE MOUNT SUPER FAST RECOVERY RECTIFIER

VOLTAGE 200 to 600 Volts **CURRENT** 10 Amperes

TO-251AB

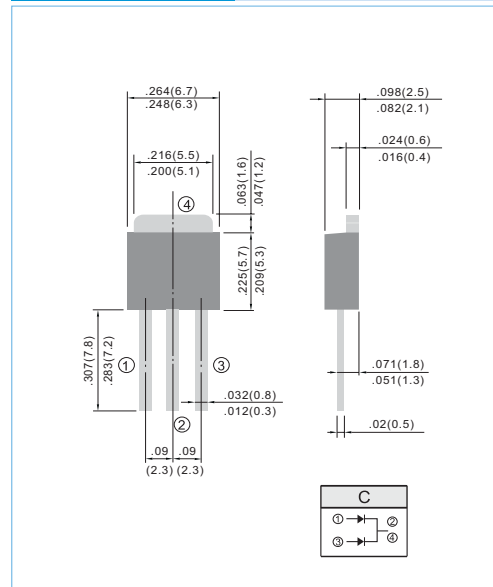
Unit : inch (mm)

FEATURES

- For surface mounted 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
- Pb free product are available : 99% Sn above can meet Rohs environment substance directive request

MECHANICAL DATA

Case: D PAK/TO-252 molded plastic
 Terminals: Solder plated, solderable per MIL-STD-202G, Method 208
 Polarity: Color band denotes cathode
 Standard packaging: 16mm tape (EIA-481)
 Weight: 0.015 ounce, 0.4 gram.



MAXIMUM RATING AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.
 For capacitive load, derate current by 20%

PARAMETER	SYMBOL	ED1002CT	ED1003CT	ED1004CT	ED1006CT	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 .375"(9.5mm) lead length at T _c =100°C	I _{AV}	10.0				A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I _{FSM}	100				A
Maximum Forward Voltage at 5.0A	V _F	0.95	1.3		1.7	V
Maximum DC Reverse Current T _A =25 °C at Rated DC Blocking Voltage T _A =100 °C	I _R	5.0 50				uA
Maximum Reverse Recovery Time (Note 1)	T _{RR}	35				ns
Maximum thermal Resistance (Note 2)	R _{θJC} R _{θJA}	11 80				°C / W
Operating and Storage Temperature Range T _J , T _{STG}	T _J , T _{STG}	-55 TO +150				°C

NOTES:

1. Reverse Recovery Test Conditions: I_F=.5A, I_R=1A, I_{rr}=.25A.
2. Mounted on P.C. Board with 14mm² (.013mm thick) copper pad areas.
3. Both Bonding and Chip structure are available.



RATING AND CHARACTERISTIC CURVES

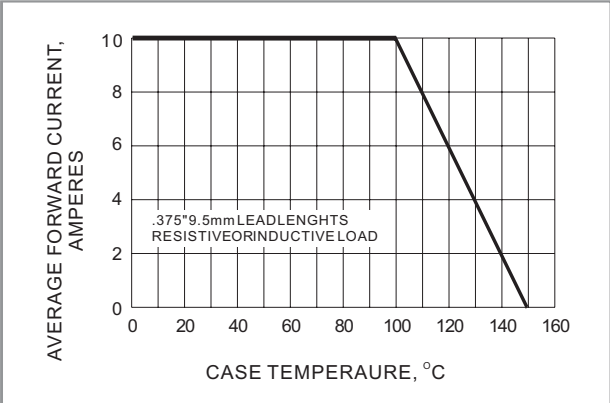


Fig.1- FORWARD CURRENT DERATING CURVE

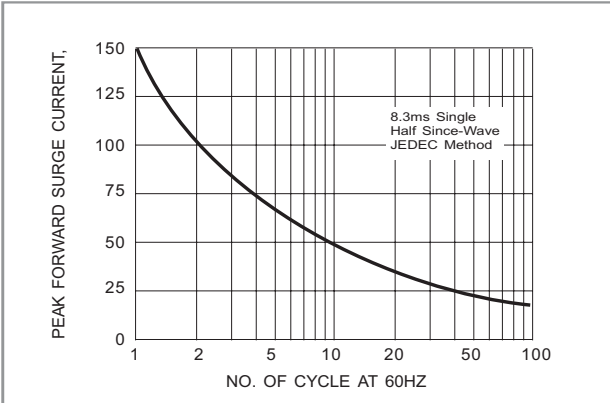


Fig.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

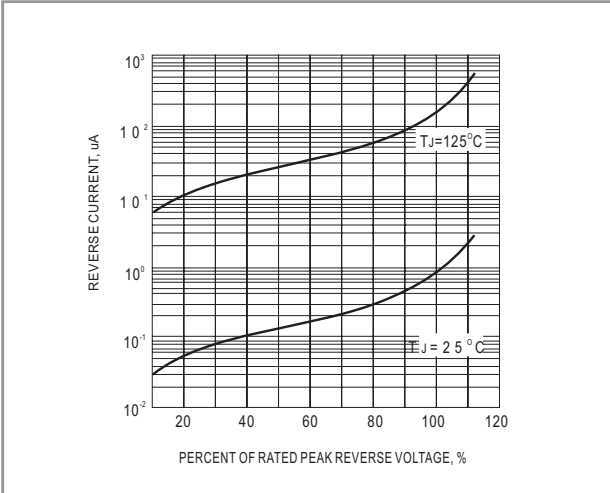


Fig.3- TYPICAL REVERSE CHARACTERISTIC

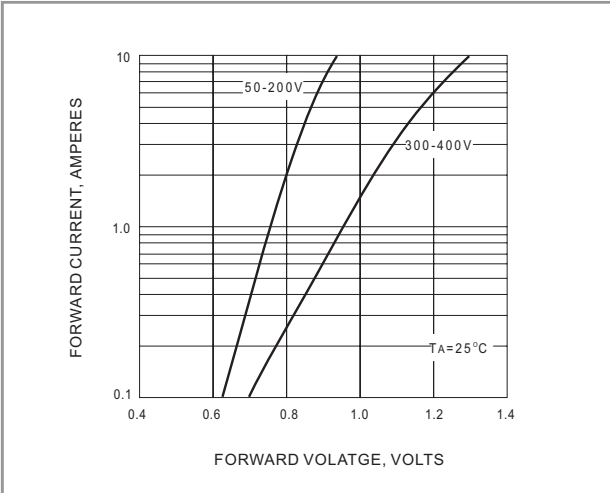


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC