PANJIT SEMI CONDUCTOR

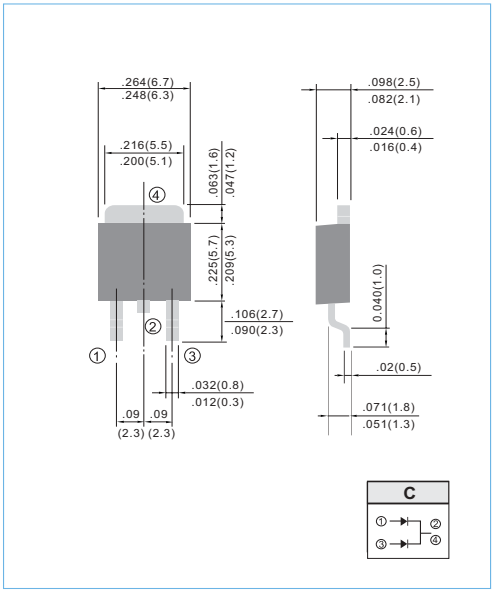
DATA SHEET

ED1002CS~ED1006CS

SURFACE MOUNT SUPER FAST RECOVERY RECTIFIER

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

TO-252 / DPAK 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
- Both normal and Pb free product are available :
  Normal : 80~95% Sn, 5~20% Pb
  Pb free: 98.5% Sn above

MECHANICALDATA

Case: D PAK/TO-252 molded plastic

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

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	ED1002CS	ED1003CS	ED1004CS	ED1006CS	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 Tc=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 VoltageT_A=100 °C	I_R	5.0 50				uA
Maximum Reverse Recovery Time (Note 1)	T_{RR}	35				ns
Maximum thermal Resistance (Note 2)	RθJC RθJA	11 80				°C / W
Operating and Storage Temperature RangeT_J,T_{STG}	T_J,T_{STG}	-55 TO +150				°C

NOTES:

1. Reverse Recovery Test Conditions: I_F=.5A, I_R=1A, Irr=.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

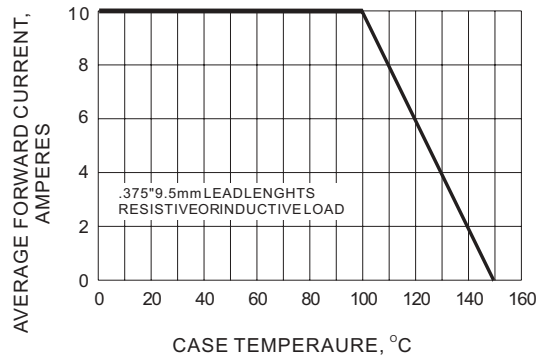


Fig.1- FORWARD CURRENT DERATING CURVE

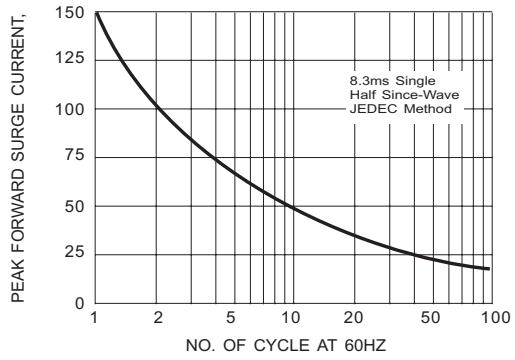


Fig.2- MAXIMUM NON - REPETITIVE SURGE CURRENT

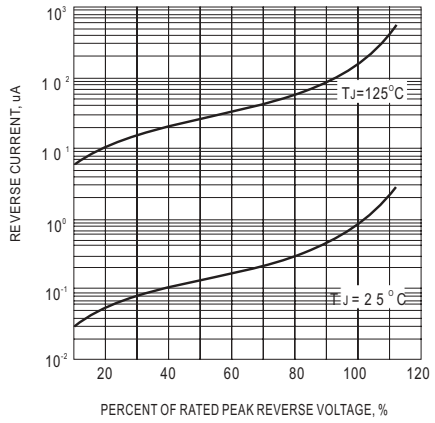


Fig.3- TYPICAL REVERSE CHARACTERISTIC

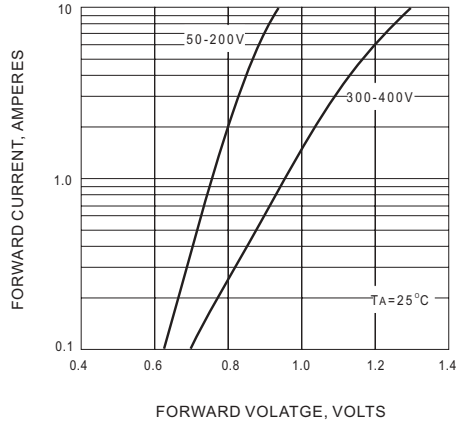


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC