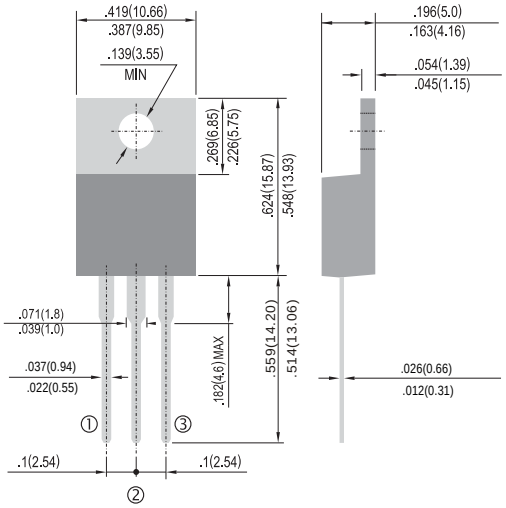
ER2000CT~ER2006CT

ISOLATION SUPERFAST RECOVERY RECTIFIER

VOLTAGE 50 to 600 Volts **CURRENT** 20.0 Amperes

Green

TO-220AB Unit: inch (mm)

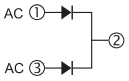


FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O. Flame Retardant Epoxy Molding Compound.
- Exceeds environmental standards of MIL-S-19500/228
- Low power loss, high efficiency.
- Low forward voltage, high current capability
- High surge capacity.
- Super fast recovery times, high voltage.
- Epitaxial chip construction.
- Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- Case: TO-220AB Molded plastic
- Terminals: Lead solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Standard packaging: Any



MAXIMUM RATING AND ELECTRICAL CHARACTERISTICSS

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	ER2000CT	ER2001CT	ER2001ACT	ER2002CT	ER2003CT	ER2004CT	ER2006CT	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	150	200	300	400	600	V
Maximum RMS Voltage	V_{RMS}	35	70	105	140	210	280	420	V
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	300	400	600	V
Maximum Average Forward Current at T_C=90°C	$I_{F(AV)}$	20							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	200							A
Maximum Forward Voltage at 10A	V_F	0.95				1.3		1.7	V
Maximum DC Reverse Current at Rated DC Blocking Voltage T_J=25 °C T_J=100 °C	I_R	5.0 500							μA
Maximum Reverse Recovery Time (Note 2)	t_{rr}	35							ns
Typical Junction Capacitance (Note 1)	C_J	85							pF
Typical thermal Resistance (Note 3)	$R_{\theta Jc}$	3							°C / W
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-55 to +150							°C

NOTES:

1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
2. Reverse Recovery Test Conditions: I_F=.5A, I_R=1A, Irr=.25A.
3. Both Bonding and Chip structure are available.

ER2000CT~ER2006CT

RATING AND CHARACTERISTIC CURVES

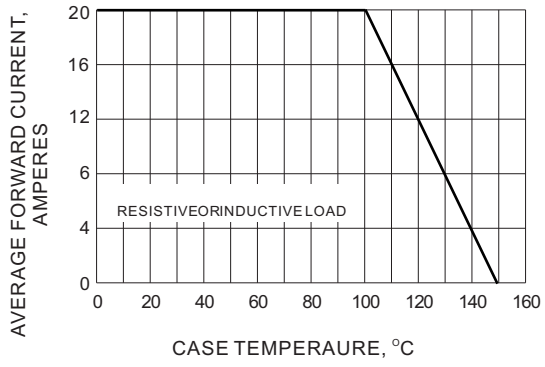


Fig.1- FORWARD CURRENT DERATING CURVE

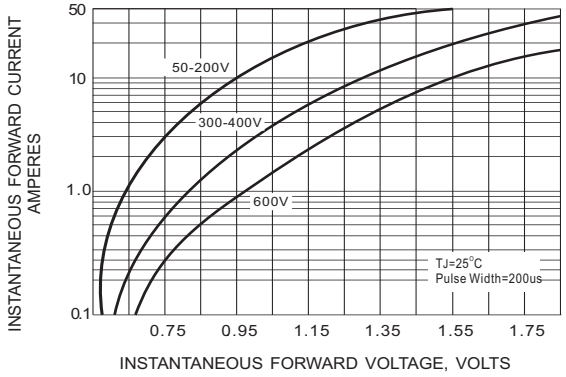


Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

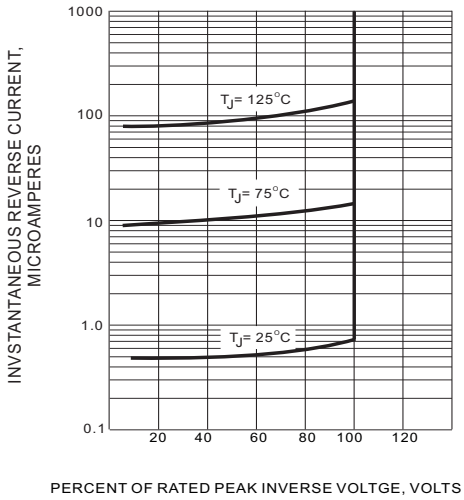


FIG.3 TYPICAL REVERSE CHARACTERISTICS

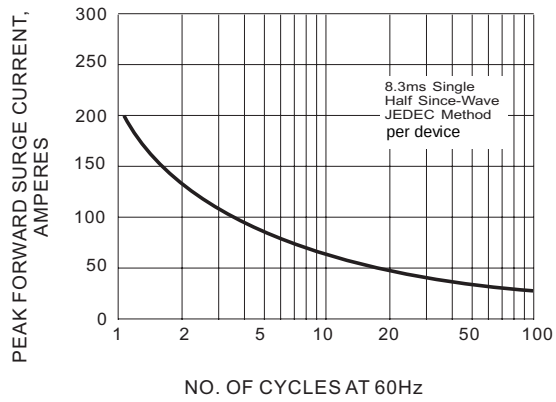


Fig.4- MAXIMUM NON - REPETITIVE SURGE CURRENT