

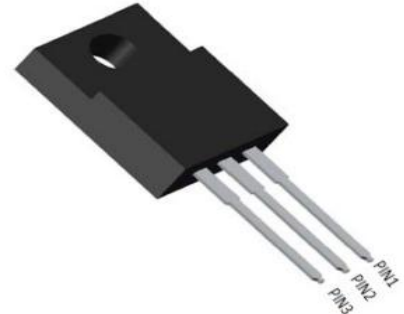
Ultra-Fast Recovery Rectifier Diodes

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O. Flame Retardant Epoxy Molding Compound.
- 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 compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

- Case: ITO-220AB Molded plastic
- Terminals: Lead solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Standard packaging: Any
- Weight: 0.056 ounces, 1.6 grams.



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	ER1600FCT	ER1601FCT	ER1601AFCT	ER1602FCT	ER1603FCT	ER1604FCT	ER1606FCT	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)}	16							A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	125							A
Maximum Forward Voltage at 8A	V _F	0.95				1.3		1.7	V
Maximum DC Reverse Current at T _J =25°C Rated DC Blocking VoltageT _J =100°C	I _R	1 500							μA
Maximum Reverse Recovery Time (Note 2)	t _{rr}	35							ns
Typical Junction Capacitance (Note 1)	C _J	62							pF
Typical Thermal Resistance	R _{θJC}	3							°C / W
Operating and Storage Temperature Range	T _J ,T _{STG}	-50 to +150							°C

NOTES :

1. Measured at 1 MHz and applied reverse voltage of 4 VDC.
2. Reverse Recovery Test Conditions: $I_F = 0.5\text{A}$, $I_R = 1\text{A}$, $I_{rr} = 0.25\text{A}$.
3. Both Bonding and Chip structure are available.

RATING AND CHARACTERISTIC CURVES

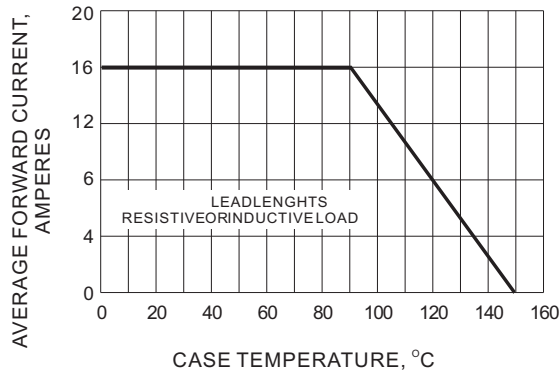


Fig.1- FORWARD CURRENT DERATING CURVE

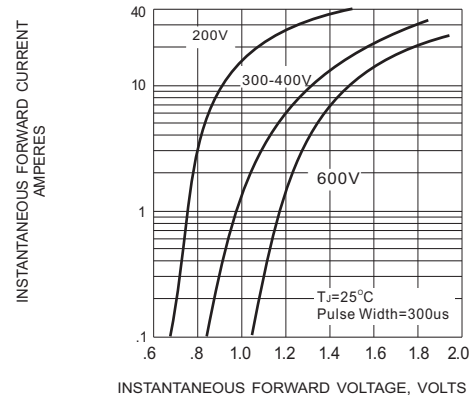


Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

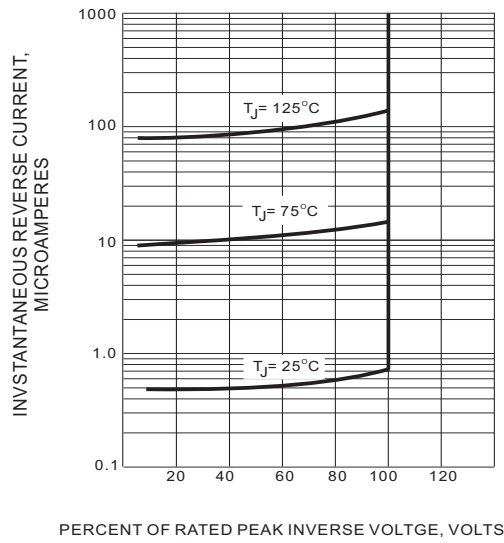


FIG.3 TYPICAL REVERSE CHARACTERISTICS

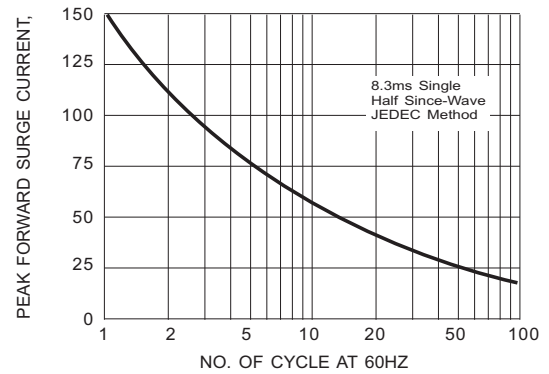


Fig.4- MAXIMUM NON - REPETITIVE SURGE CURRENT

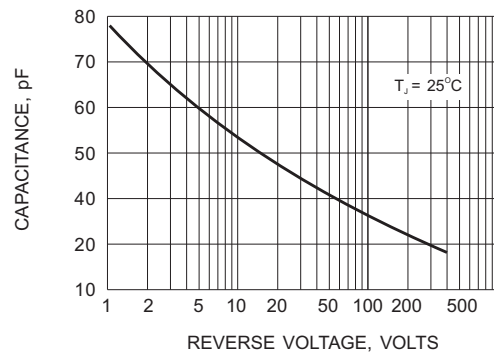
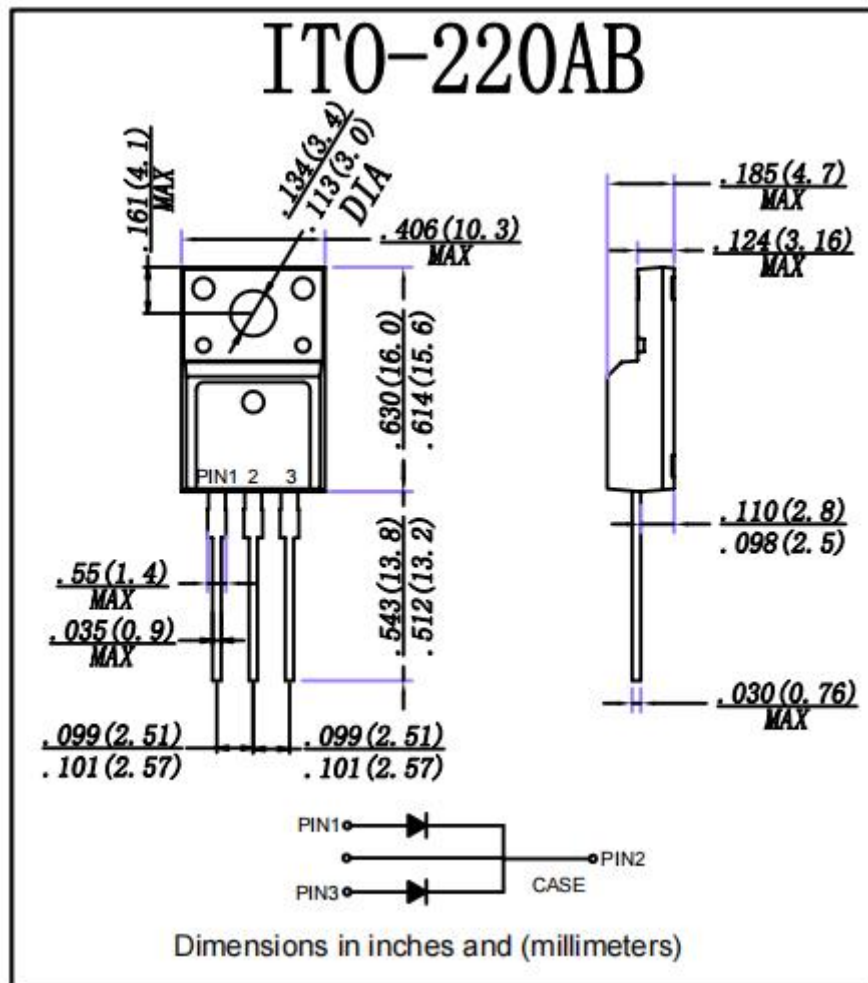


Fig.5- TYPICAL JUNCTION CAPACITANCE

■ Ordering Information (Example)

PREFERED	PACKAGE CODE	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
ER1600FCT~ER1606FCT	ITO-220AB	50	1000	5000	Tube

■ Outline Dimensions



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