



ER1000FCT~ER1006FCT

SUPERFAST RECOVERY RECTIFIERS

VOLTAGE 50 to 600 Volts **CURRENT** 10 Amperes

FEATURES

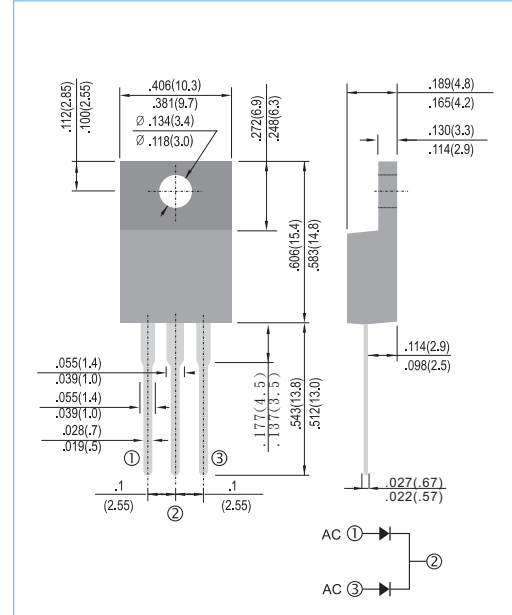
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O. Flame Retardant Epoxy Molding Compound.
- Exceeds environmental standards of MIL-S-19500/228
- Low power loss, high efficiency.
- Low forward voltage, high current capability
- High surge capacity.
- Super fast recovery times, high voltage.
- Lead free in comply with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Case: ITO-220AB Molded plastic
- Terminals: Lead solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Standard packaging: Any
- Weight: 0.0655 ounces, 1.859grams.

ITO-220AB

Unit: inch (mm)



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	ER1000FCT	ER1001FCT	ER1001AFCT	ER1002FCT	ER1003FCT	ER1004FCT	ER1006FCT	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 $T_c = 100^\circ\text{C}$	$I_{F(AV)}$	10.0							A	
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	150							A	
Maximum Forward Voltage at 5A, per element	V_F	0.95			1.30		1.7		V	
Maximum DC Reverse Current at $T_j = 25^\circ\text{C}$ Rated DC Blocking Voltage $T_j = 100^\circ\text{C}$	I_R	1.0				500				μA
Maximum Reverse Recovery Time (Note 2)	t_{rr}	35			50				ns	
Typical Junction capacitance (Note 1)	C_j	62							pF	
Typical Thermal Resistance	$R_{\theta JC}$	3.0							$^\circ\text{C} / \text{W}$	
Operating Junction and Storage Temperature Range	T_j, T_{STG}	-55 to +150							$^\circ\text{C}$	

NOTES:

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



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RATING AND CHARACTERISTIC CURVES

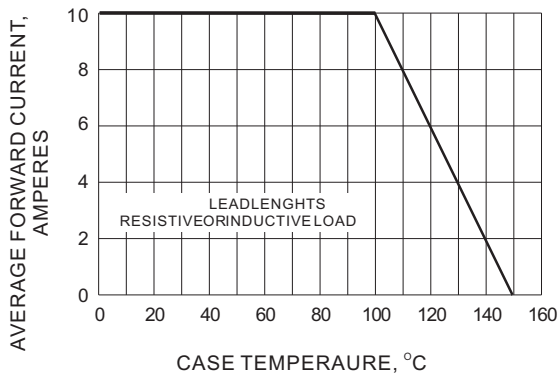


Fig.1- FORWARD CURRENT DERATING CURVE

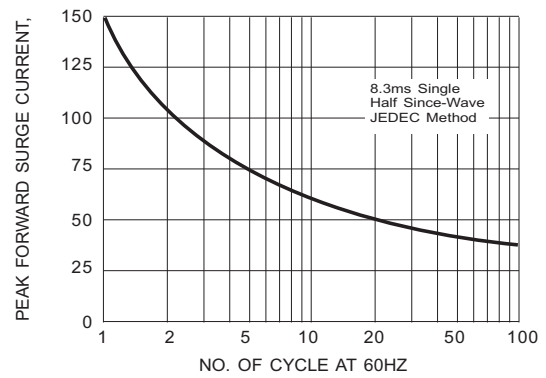


Fig.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

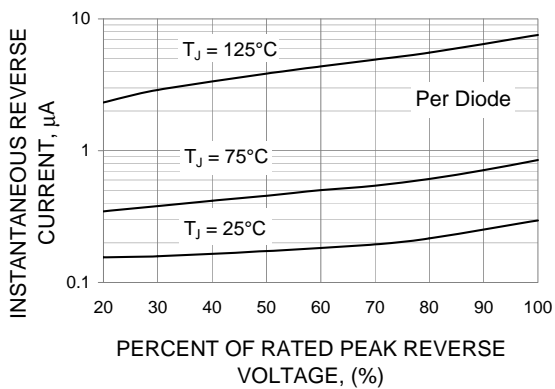


Fig.3- TYPICAL REVERSE CHARACTERISTIC

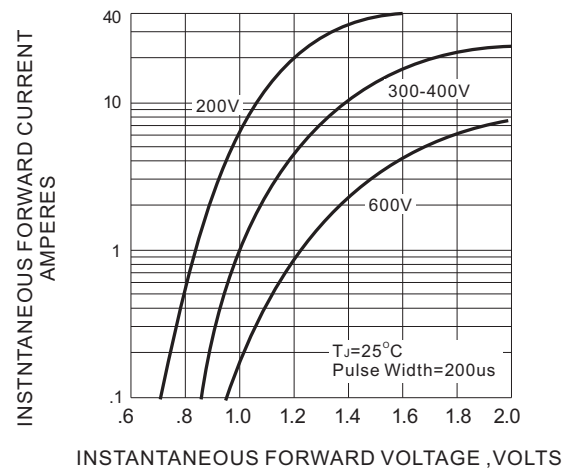


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC



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For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
T/B	A	N/A	0	HF	0	serial number
T/R	R	7"	1	RoHS	1	serial number
B/P	B	13"	2			
T/P	T	26mm	X			
TRR	S	52mm	Y			
TRL	L	PBCU	U			
FORMING	F	PBCD	D			

Part No_packing code_Version

ER1000FCT_T0_00001

ER1000FCT_T0_10001