# JIEJIE MICROELECTRONICS CO., LTD.

# JEUR2006FPCT EPI ULTRAFAST RECOVERY RECTIFIER

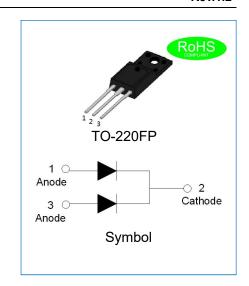
Rev.1.2

#### **DESCRIPTION**

- Plastic package has underwriters laboratory flammability classification 94V-0
- ♦ Lead free in comply with EU RoHS 2011/65/EU directives
- ♦ Low reverse leakage current
- ♦ Ultrafast recovery time and soft recovery characteristics
- ♦ Low recovery loss

#### **MECHANICAL DATA**

- ♦ Case: TO-220FP molded plastic over passivated junction
- ♦ Terminals: Solder plated, solderable per J-STD-002
- ♦ Weight:2.07 gram



## **ABSOLUTE MAXIMUM RATING** (Rating at 25℃ case temperature unless otherwise specified.)

Parameter	Symbol	JEUR2006FPCT	Unit
Maximum repetitive peak reverse voltage	$V_{RRM}$	600	V
Maximum RMS voltage	VRMS	420	V
Maximum DC blocking voltage	V <sub>DC</sub>	600	V
Maximum average forward current at T <sub>C</sub> =100 ℃	I <sub>F(AV)</sub>	20	Α
Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load (per diode)	I <sub>FSM</sub>	150	Α
Junction temperature and storage temperature range	$T_j, T_{stg}$	-55 to +150	$^{\circ}$

#### **ISOLATION CHARACTERISTICS**

Symbol	Parameter	Conditions	Min.	Тур.	Max.	Unit
		50Hz≤f≤60Hz;RH≤65%; from all pins to external heatsink;				
V <sub>isol(RMS)</sub>	V <sub>isol(RMS)</sub> RMS isolation voltage	sinusoidal waveform;	-	-	2500	V
		clean and dust free				
C <sub>isol</sub>	Isolation capacitance	from cathode to external	_	10	_	pF
Oisol	isolation capacitance	heatsink		10	_	РΙ

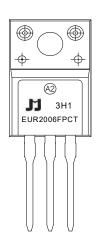
# **ELECTRICAL CHARACTERISTICS**(Rating at 25°C case temperature unless otherwise specified.)

Parameter			Min.	Тур.	Max.	Unit
Forward voltage	I <sub>F</sub> =10A,T <sub>j</sub> =25℃	$V_{F}$		-	1.5	V
Reverse current at rated DC	T <sub>j</sub> =25℃	ı	-	-	5	μΑ
blocking voltage	T <sub>j</sub> =150°C	I <sub>R</sub>	-	-	200	
Reverse recovery time	I <sub>F</sub> =0.5A,I <sub>R</sub> =1A,I <sub>rr</sub> =0.25A	t <sub>rr</sub>	-	-	50	ns

#### THERMAL RESISTANCES

Symbol	Parameter	Min.	Тур.	Max.	Unit
R <sub>th(j-c)</sub>	Thermal resistance from junction to case	-	3.6	-	°C/W

#### **MARKING**



EUR	EPI Ultrafast Recovery Rectifier
20	I <sub>F(AV)</sub> =20A
06	V <sub>RRM</sub> :600V
FP	Package:TO-220FP
СТ	Common cathode

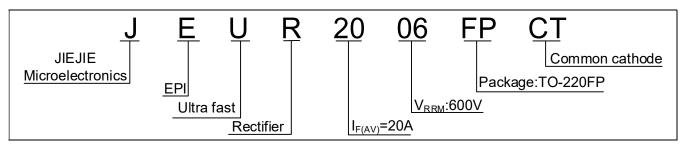
 $\underline{\mathbf{x}}$ H1: Month, 1、2、3  $\sim$  9、A、B、C

3<u>x</u>1:

2018	2019	2020	2021	2022	2023	2024
Н	I	J	K	L	М	Ν
2025	2026	2027	2028	2029	2030	
0	Р	Q	R	S	T	

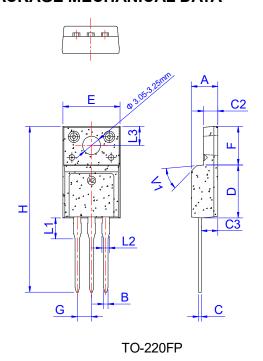
3Hx: Batch number

#### **ORDERING INFORMATION**





# PACKAGE MECHANICAL DATA

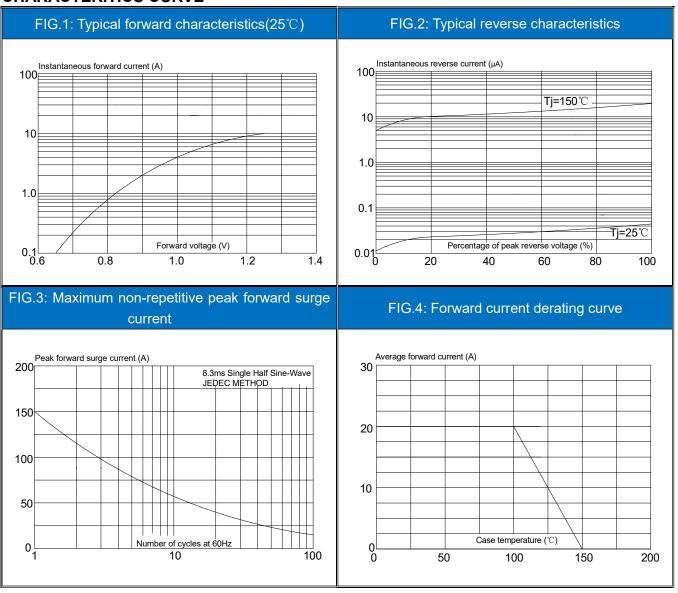


	Dimensions						
Ref.		Millimete	rs	Inches			
	Min.	Тур.	Max.	Min.	Тур.	Max.	
Α	4.50		4.90	0.177		0.193	
В	0.74	0.80	0.83	0.029	0.031	0.033	
С	0.47		0.65	0.019		0.026	
C2	2.45		2.75	0.096		0.108	
С3	2.60		3.00	0.102		0.118	
D	8.80		9.30	0.346		0.366	
E	9.80		10.4	0.386		0.410	
F	6.40		6.80	0.252		0.268	
G	2.40		2.70	0.094		0.106	
Н	28.0		29.8	1.102		1.173	
L1		3.63			0.143		
L2	1.14		1.70	0.045		0.067	
L3		3.30			0.130		
V1		45°			45°		

### **PACKAGE INFORMATION-TO-220FP**

OUTLINE	UNIT WEIGHT	TUBE	PER CARTON
	(g/PCS) typ.	(PCS)	(PCS)
TUBE	2.07	50	5,000

# **CHARACTERITICS CURVE**





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