



JEUR0806FPL

EPI ULTRAFAST SOFT RECOVERY RECTIFIER

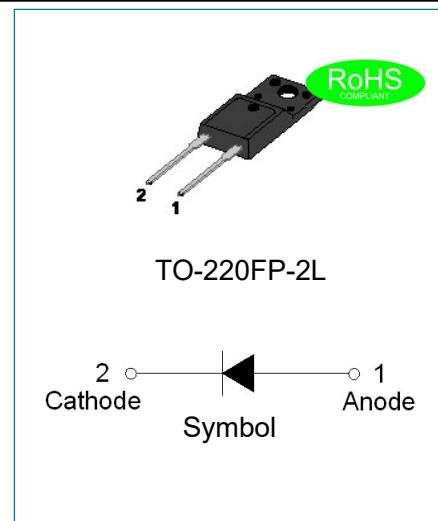
Rev.1.1

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-2L molded plastic over passivated junction
- ✧ Terminals: Solder plated, solderable per J-STD-002
- ✧ Weight: 2gram



ABSOLUTE MAXIMUM RATING (Rating at 25°C case temperature unless otherwise specified.)

Parameter	Symbol	JEUR0806FPL	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	600	V
Maximum RMS voltage	V_{RMS}	420	V
Maximum DC blocking voltage	V_{DC}	600	V
Maximum average forward current at $T_C=125^\circ\text{C}$	$I_{F(AV)}$	8	A
Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	100	A
Junction temperature and storage temperature range	T_j, T_{stg}	-55 to +150	°C

ISOLATION CHARACTERISTICS

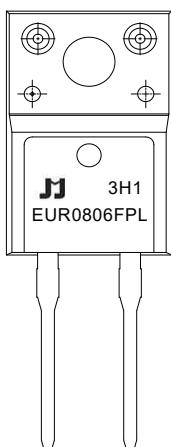
Symbol	Parameter	Conditions	Min.	Typ.	Max.	Unit
$V_{isol(RMS)}$	RMS isolation voltage	50Hz ≤ f ≤ 60Hz; RH ≤ 65 %; from all pins to external heatsink; sinusoidal waveform; clean and dust free	-	-	2500	V
C_{isol}	Isolation capacitance	from cathode to external heatsink	-	10	-	pF

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

Parameter	Symbol	Min.	Typ.	Max.	Unit
Maximum forward voltage I _F =8A ,T _j =25°C	V _F	-	-	1.5	V
I _F =8A ,T _j =150°C		-	-	1.2	
Maximum DC reverse current at rated DC blocking voltage T _j =25°C	I _R	-	-	5	μA
T _j =150°C		-	-	200	
Reverse recovery time	I _F =0.5A,I _R =1A,I _{rr} =0.25A	t _{rr}	-	50	ns

THERMAL RESISTANCES

Symbol	Parameter	Min.	Typ.	Max.	Unit
R _{th(j-c)}	Thermal resistance from junction to case	-	2.5	-	°C/W
R _{th(j-a)}	Thermal resistance from junction to ambient	-	10	-	°C/W
R _{th(j-l)}	Thermal resistance from junction to lead	-	4	-	°C/W

MARKING

EUR	EPI Ultrafast Recovery Rectifier	
08	I _{F(AV)} =8A	
06	V _{RRM} :600V	
FPL	Package:TO-220FP-2L	

3H1: Month, 1、2、3 ~ 9、A、B、C

3x1:

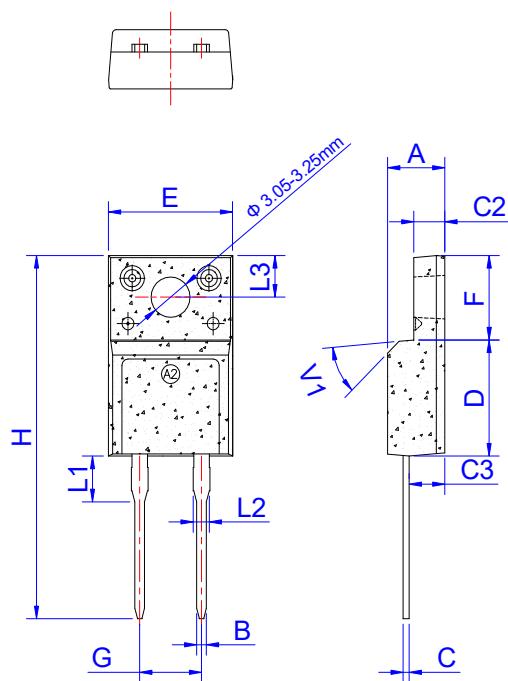
2018	2019	2020	2021	2022	2023	2024
H	I	J	K	L	M	N
2025	2026	2027	2028	2029	2030	...
O	P	Q	R	S	T	...

3Hx: Batch number

ORDERING INFORMATION

J	E	U	R	08	06	FPL	Package: TO-220FP-2L
JIEJIE Microelectronics	Epi	Ultra fast	Rectifier				V _{RRM} :600V I _{F(AV)} =8A

PACKAGE MECHANICAL DATA



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	4.50		4.90	0.177		0.193
B	0.74	0.80	0.83	0.029	0.031	0.033
C	0.47		0.65	0.019		0.026
C2	2.45		2.75	0.096		0.108
C3	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		5.08			0.200	
H	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-2L

OUTLINE	UNIT WEIGHT (g/PCS) typ.	TUBE (PCS)	PER CARTON (PCS)
TUBE	2	50	5,000

CHARACTERISTICS CURVE

FIG.1: Typical forward characteristics

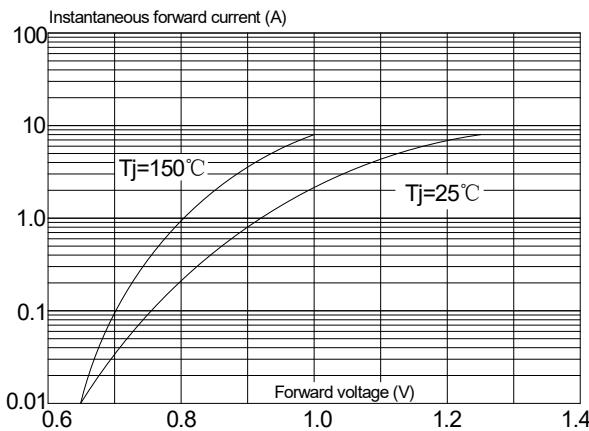


FIG.2: Typical reverse characteristics

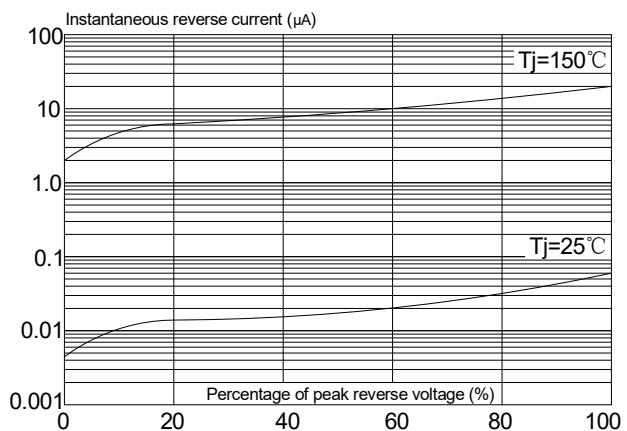


FIG.3: Maximum non-repetitive peak forward surge current

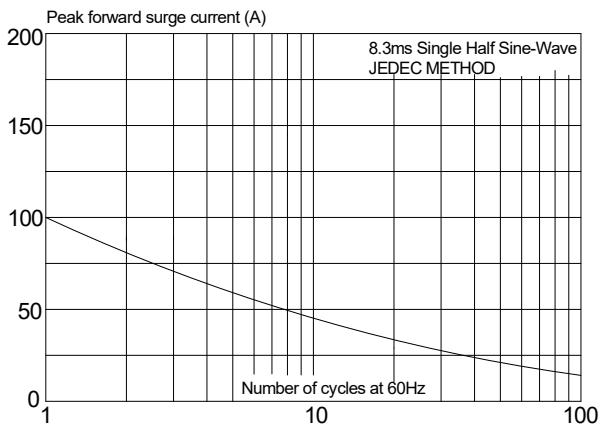
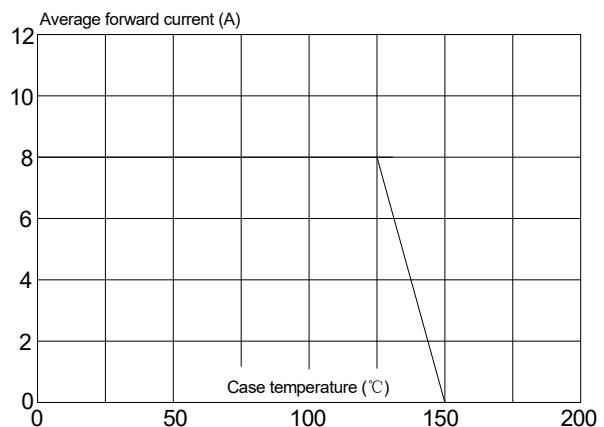


FIG.4: Forward current derating curve



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