



## JEUR1506FPL

### EPI ULTRAFAST SOFT RECOVERY RECTIFIER

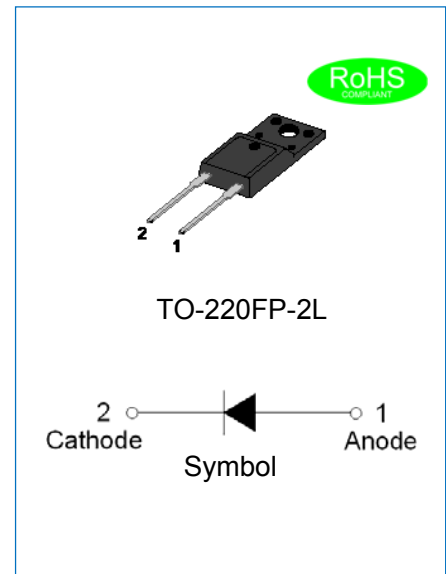
Rev.1.2

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



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

Parameter	Symbol	JEUR1506FPL	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 $T_C=80^\circ\text{C}$	$I_{F(AV)}$	15	A
Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	180	A
Peak forward surge current: 10ms single half sine-wave superimposed on rated load		150	
Junction temperature and storage temperature range	$T_j, T_{stg}$	-55 to +175	°C

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

Parameter	Symbol	Min.	Typ.	Max.	Unit
Maximum forward voltage at 15A	$V_F$	-	-	1.5	V
Maximum DC reverse current at rated dc blocking voltage	$I_R$	$T_j=25^\circ\text{C}$	-	5	uA
		$T_j=150^\circ\text{C}$	-	300	
Maximum reverse recovery time@ $I_F=0.5\text{A}, I_R=1.0\text{A}, I_{RR}=0.25\text{A}$	$t_{rr}$	-	-	50	ns

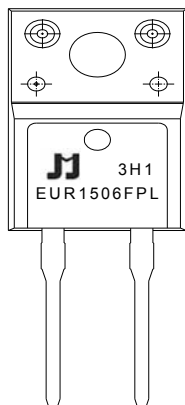
**ISOLATION CHARACTERISTICS**

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

**THERMAL RESISTANCES**

Symbol	Parameter	Min.	Typ.	Max.	Unit
$R_{th(j-c)}$	Junction to case thermal resistance	-	6.5	-	°C/W

**MARKING**



EUR	EPI Ultrafast Recovery Rectifier
15	$I_{F(AV)}=15A$
06	$V_{RRM}:600V$
FPL	Package:TO-220FP-2L

$xH1$ : Month, 1、2、3 ~ 9、A、B、C

$3x1$ :

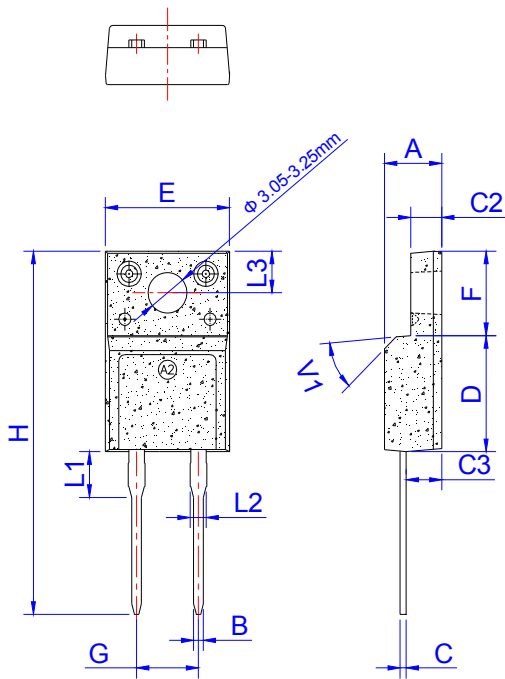
2018	2019	2020	2021	2022	2023	2024
H	I	J	K	L	M	N
2025	2026	2027	2028	2029	2030	...
O	P	Q	R	S	T	...

$3Hx$ : Batch number

**ORDERING INFORMATION**

<p><b>J</b></p> <p>JIEJIE Microelectronics</p>	<p><b>E</b></p> <p>Epi</p>	<p><b>U</b></p> <p>Ultrafast</p>	<p><b>R</b></p> <p>Rectifier</p>	<p><b>15</b></p> <p><math>I_{F(AV)}=15A</math></p>	<p><b>06</b></p> <p><math>V_{RRM}:600V</math></p>	<p><b>FPL</b></p> <p>Package: TO-220FP-2L</p>
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**PACKAGE MECHANICAL DATA**

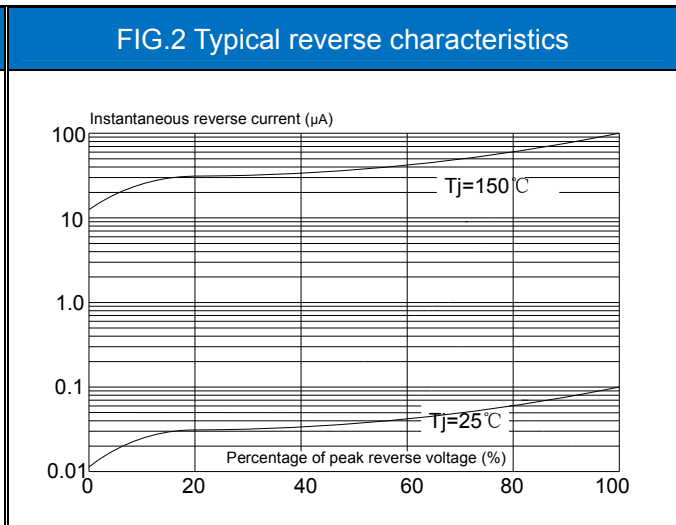
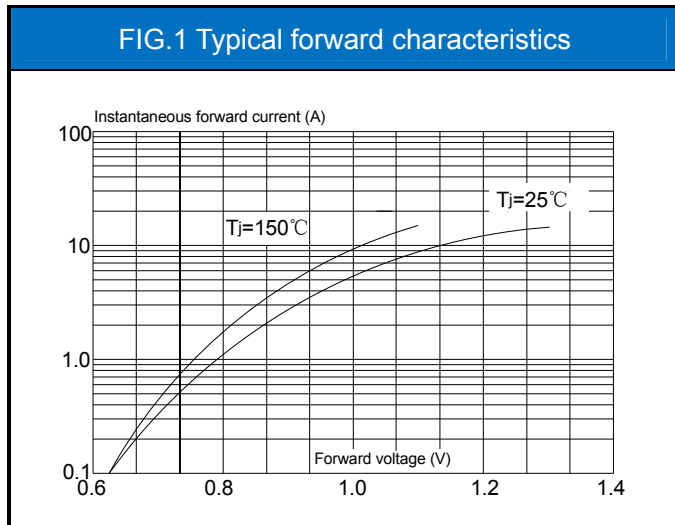


Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	4.50		4.90	0.177		0.193
B	0.74	0.80	0.83	0.029	0.031	0.033
C	0.47		0.65	0.019		0.026
C2	2.45		2.75	0.096		0.108
C3	2.60		3.00	0.102		0.118
D	8.80		9.30	0.346		0.366
E	9.80		10.4	0.386		0.410
F	6.40		6.80	0.252		0.268
G		5.08			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°	

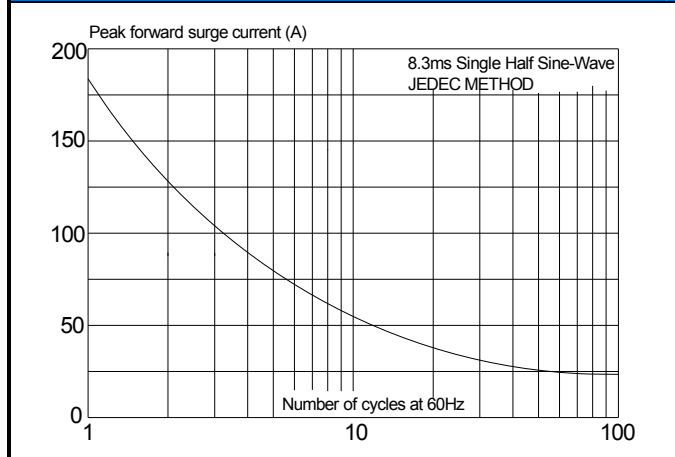
**PACKAGE INFORMATION-TO-220FP-2L**

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

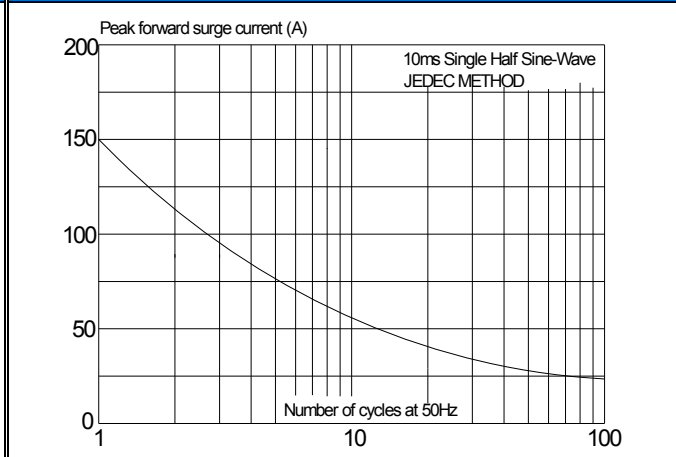
CHARACTERISTICS CURVE



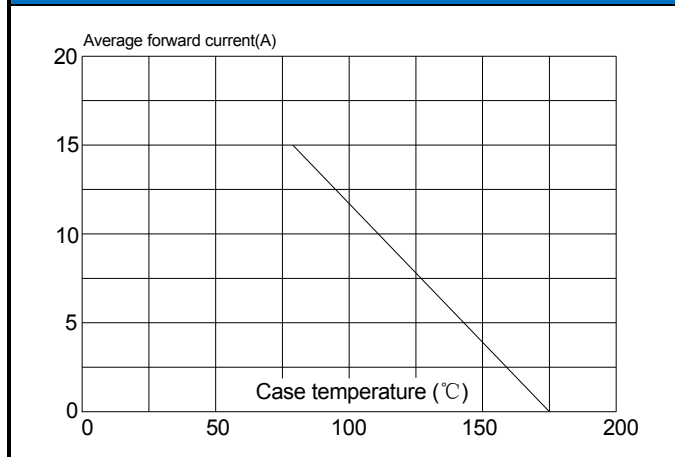
**FIG.3 Maximum non-repetitive peak forward surge current(8.3ms single half sine-wave)**



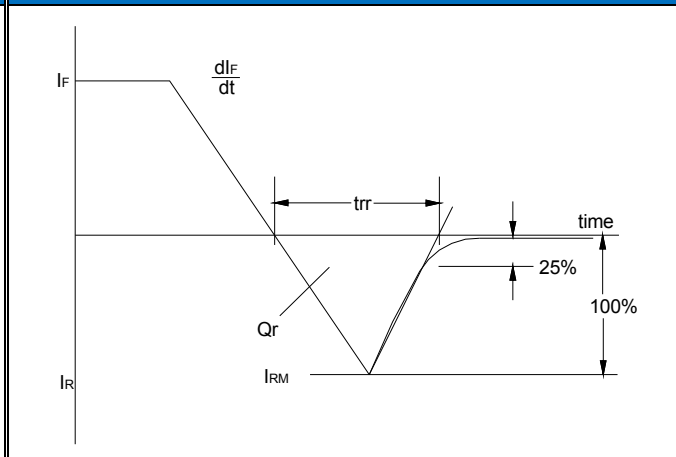
**FIG.4 Maximum non-repetitive peak forward surge current(10ms single half sine-wave)**



**FIG.5: Forward current derating curve**



**FIG.6: Reverse recovery definitions**




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