## JIEJIE MICROELECTRONICS CO., LTD.

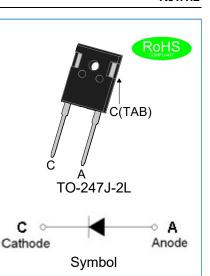
#### JEER3006SL EPI SUPERFAST RECOVERY RECTIFIER

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
- ♦ Superfast recovery time and soft recovery characteristics
- ♦ Low recovery loss

#### **MECHANICAL DATA**

- ♦ Case: TO-247J-2L molded plastic
- ♦ Terminals: Solder plated, solderable per J-STD-002
- ♦ Weight:5.75gram



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

Parameter	Symbol	JEER3006SL	Unit
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	600	V
Maximum RMS voltage	Vrms	420	V
Maximum DC blocking voltage	V <sub>DC</sub>	600	V
Average forward current at T <sub>mb</sub> ≤105℃	I <sub>F(AV)</sub>	30	А
Peak forward surge current: 10ms single half sine-wave superimposed on rated load	1	180	
Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load	- I <sub>FSM</sub>	200	A
Junction temperature and storage temperature range	Tj,Tstg	-55 to +150	°C

Rev.1.2

### JEER3006SL

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

Parame	ter	Symbol	Min.	Тур.	Max.	Unit
	<b>T</b> j <b>=25</b> ℃		-	1.65	2.0	V
Forward voltage @I <sub>F</sub> =30A	<b>T</b> j <b>=150</b> ℃	VF	-	1.35	-	
Reverse current at rated DC	<b>T</b> j <b>=25</b> ℃		-	-	5	μA
blocking voltage	<b>T</b> j <b>=150</b> ℃	I <sub>R</sub>	-	-	400	
	I <sub>F</sub> =0.5A,I <sub>R</sub> =1A,I <sub>rr</sub> =0.25A		-	-	35	ns
	I <sub>F</sub> =30A,V <sub>R</sub> =30V, di/dt=200A/µs,Tj=25℃		-	41	90	
Reverse recovery time	I <sub>F</sub> =30A,V <sub>R</sub> =200V, di/dt=200A/µs,Tj=25℃	t <sub>rr</sub>	-	51	-	
	I <sub>F</sub> =30A,V <sub>R</sub> =200V, di/dt=200A/µs,T <sub>j</sub> =125℃		-	90	-	
	I <sub>F</sub> =30A,V <sub>R</sub> =200V, di/dt=200A/μs,Tj=25℃		-	5.5	-	A
Peak reverse recovery current	I <sub>F</sub> =30A,V <sub>R</sub> =200V, di/dt=200A/μs,Tj=125℃	I <sub>RM</sub>	-	12.5	-	
Deservered shares	I <sub>F</sub> =30A,V <sub>R</sub> =200V, di/dt=200A/µs,Tj=25℃		-	160	-	
Recovered charge	l <sub>F</sub> =30A,V <sub>R</sub> =200V, di/dt=200A/µs,Tj=125℃	Qr	-	580	-	nC

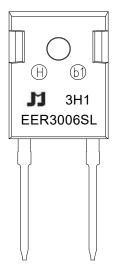
#### THERMAL RESISTANCES

Symbol	Parameter	Min.	Тур.	Max.	Unit
R <sub>th(j-mb)</sub>	Thermal resistance from junction to mounting base	-	-	1	°C/W
R <sub>th(j-a)</sub>	Thermal resistance from junction to ambient free air	-	45	-	°C/W

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#### MARKING



EER	EPI Superfast Recovery Rectifier			
30	I <sub>F(AV)</sub> =30A			
06	VRRM:600V			
SL	Package:TO-247J-2L			

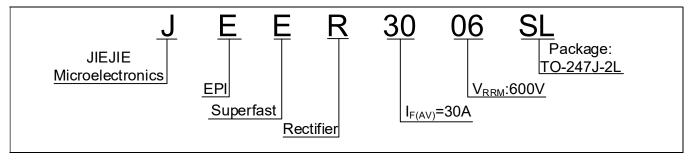
#### <u>x</u>H1: Month, 1/2/3~9/A/B/C

3**x**1:

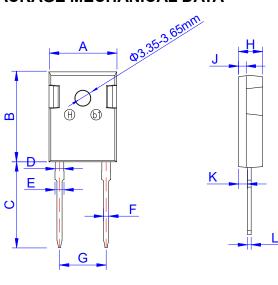
<u> </u>	<u>_</u> .						
	2018	2019	2020	2021	2022	2023	2024
	Н	I	J	K	L	М	Ν
	2025	2026	2027	2028	2029	2030	
	0	Р	Q	R	S	Т	

3Hx: Batch number

#### ORDERING INFORMATION



#### PACKAGE MECHANICAL DATA



TO-247J-2L

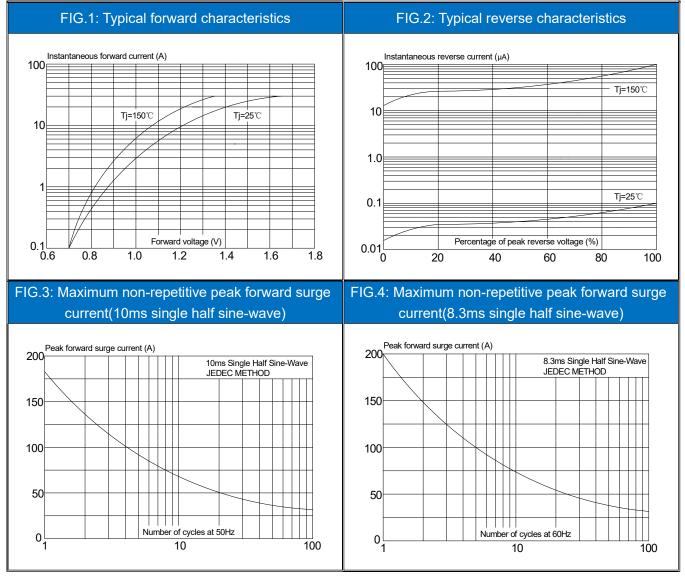
	Dimensions					
Ref.	Millimeters			Inches		
	Min.	Тур.	Max.	Min.	Тур.	Max.
A	15.50	15.80	16.10	0.610	0.622	0.634
В	20.80	21.00	21.20	0.819	0.827	0.835
С	19.70	20.00	20.30	0.776	0.787	0.799
D	1.80	2.00	2.20	0.071	0.079	0.087
E	1.90	2.10	2.30	0.075	0.083	0.091
F	1.00	1.20	1.40	0.039	0.047	0.055
G	10.50		11.30	0.413		0.445
н	4.80	5.00	5.20	0.189	0.197	0.205
J	1.90	2.00	2.10	0.075	0.079	0.083
к	2.20	2.35	2.50	0.087	0.093	0.098
L	0.41	0.60	0.79	0.016	0.024	0.031



#### PACKAGE INFORMATION-TO-247J-2L

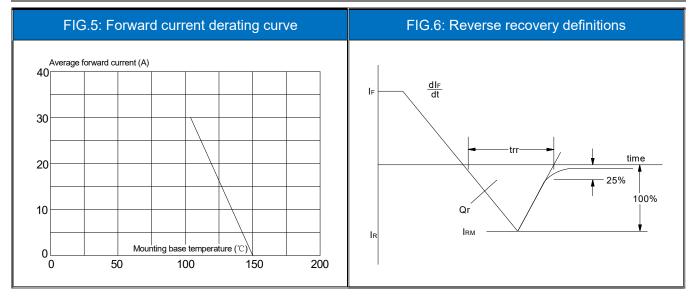
OUTLINE	UNIT WEIGHT	TUBE	PER CARTON
	(g/PCS) TYP	(PCS)	(PCS)
TUBE	5.75	30	2,250

#### **CHARACTERITICS CURVE**



### JEER3006SL

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