JIEJIE MICROELECTRONICS CO., LTD.

JEFR4006SL EPI FAST 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
- \diamond Fast 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.)

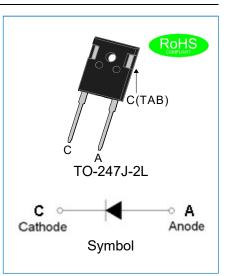
| Parameter | Symbol | JEFR4006SL | Unit |
|---|--------------------|-------------|------|
| Maximum repetitive peak reverse voltage | V _{RRM} | 600 | V |
| Maximum RMS voltage | V _{RMS} | 420 | V |
| Maximum DC blocking voltage | V _{DC} | 600 | V |
| Average forward current at $T_C \mbox{=} 125^\circ \mbox{C}$ | I _{F(AV)} | 40 | А |
| Peak forward surge current: 10ms single half sine-wave superimposed on rated load | I _{FSM} | 400 | A |
| Junction temperature and storage temperature range | T_{j},T_{stg} | -55 to +150 | °C |

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

| Parameter | | | Min. | Тур. | Max. | Unit |
|--|--|-----------------|------|------|------|------|
| Forward voltage @I _F =40A Tj=25°C | | VF | - | 1.25 | 1.4 | V |
| Reverse current at rated DC | T j =25 ℃ | | - | - | 5 | |
| blocking voltage | Tj=150℃ | IR | - | - | 400 | μA |
| Reverse recovery time | I _F =0.5A,I _R =1A,I _{RR} =0.25A | t _{rr} | - | - | 75 | ns |

THERMAL RESISTANCES

| Symbol | Parameter | Min. | Тур. | Max. | Unit |
|----------------------|--|------|------|------|------|
| R _{th(j-c)} | Thermal resistance from junction to case | - | 0.8 | - | °C/W |



Rev.1.3

JEFR4006SL

JieJie Microelectronics Co., Ltd.

MARKING

| JJ EFR4 | 3H1 1006SL |
|------------|---------------|
| | |
| | |

| EFR | EPI Fast Recovery Rectifier |
|-----|-----------------------------|
| 40 | I _{F(AV)} =40A |
| 06 | VRRM:600V |
| SL | Package:TO-247J-2L |

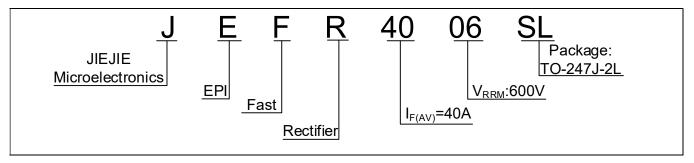
<u>x</u>H1: Month, 1/2/3~9/A/B/C

3<u>x</u>1:

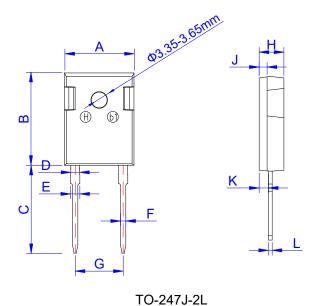
| - | | | | | | | |
|---|------|------|------|------|------|------|------|
| | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
| | Н | I | J | K | L | М | Ν |
| | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | |
| | 0 | Р | Q | R | S | Т | |
| _ | | | | | | | |

3Hx: Batch number

ORDERING INFORMATION



PACKAGE MECHANICAL DATA



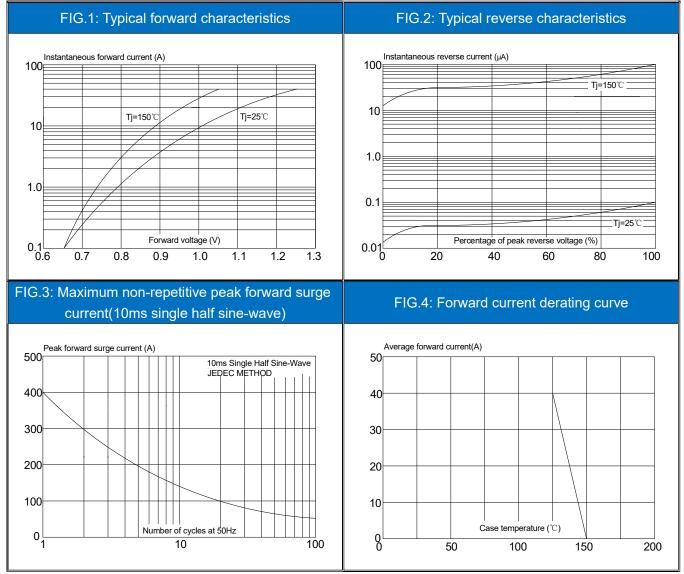
| | Dimensions | | | | | | |
|------|-------------|-------|-------|--------|-------|-------|--|
| Ref. | Millimeters | | | Inches | | | |
| | Min. | Тур. | Max. | Min. | Тур. | Max. | |
| Α | 15.50 | 15.80 | 16.10 | 0.610 | 0.622 | 0.634 | |
| В | 20.80 | 21.00 | 21.20 | 0.819 | 0.827 | 0.835 | |
| С | 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



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