JIEJIE MICROELECTRONICS CO., LTD.

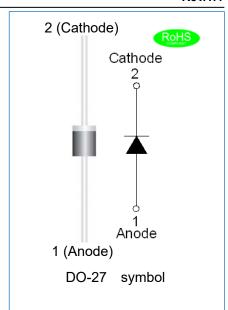
JEFR0408G2 EPI FAST SOFT RECOVERY RECTIFIER

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
- ♦ Fast recovery time and soft recovery characteristics
- ♦ Low recovery loss
- Applications for use in switching power supplies, inverters and as free wheeling diodes

MECHANICAL DATA

- ♦ Case: DO-27 molded plastic
- ♦ Terminals: Solder plated, solderable per J-STD-002
- ♦ Polarity: Color band denotes cathode end



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

| Parameter | Symbol | JEFR0408G2 | Unit |
|--|--------------------|-------------|------|
| Maximum repetitive peak reverse voltage | V _{RRM} | 800 | V |
| Maximum RMS voltage | VRMS | 560 | V |
| Maximum DC blocking voltage | VDC | 800 | V |
| Average forward current at $T_A{=}35^\circ\!\mathrm{C}$ | I _{F(AV)} | 4 | А |
| Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load | Ifsm | 125 | А |
| 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 |
|-----------------------|--|-----------------|------|------|------|------|
| | I ⊧=3A, Tj=150 ℃ | | - | - | 1.53 | V |
| Forward voltage | l ⊧=3A, Tj=25 ℃ | VF | - | - | 1.75 | |
| | I ⊧=4A, Tj=25 ℃ | | - | - | 1.85 | |
| Deverse europt | V R=800V,Tj=25 ℃ | 1 | - | - | 5 | μA |
| Reverse current | V R=800V,Tj=150 ℃ | I _R | - | - | 200 | |
| Reverse recovery time | I _F =0.5A, I _R =1A, I _{REC} =0.25A | t _{rr} | - | - | 75 | ns |
| ., | l⊧=1A, di/dt=50A/µs | | - | - | 100 | |

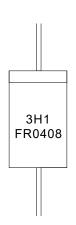
Rev.1.4

JEFR0408G2

THERMAL RESISTANCES

| Symbol | Parameter | Min. | Тур. | Max. | Unit |
|----------|--|------|------|------|------|
| Rth(j-a) | Thermal resistance from junction to ambient free air | - | 38 | - | °C/W |

MARKING



| FR | Fast Recovery Rectifier |
|----|-------------------------|
| 04 | I _{F(AV)} =4A |
| 08 | VRRM:800V |

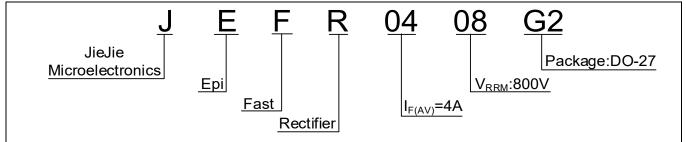
<u>x</u>H1: Month, 1/2/3~9/A/B/C

3<u>x</u>1:

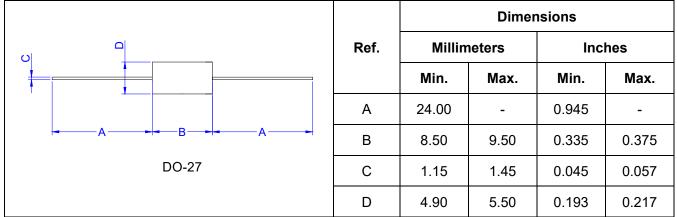
| 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
|------|------|------|------|------|------|------|
| Н | - | J | К | L | М | Ν |
| 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | |
| 0 | Р | Q | R | S | Т | |

3Hx: Batch number

ORDERING INFORMATION



PACKAGE MECHANICAL DATA

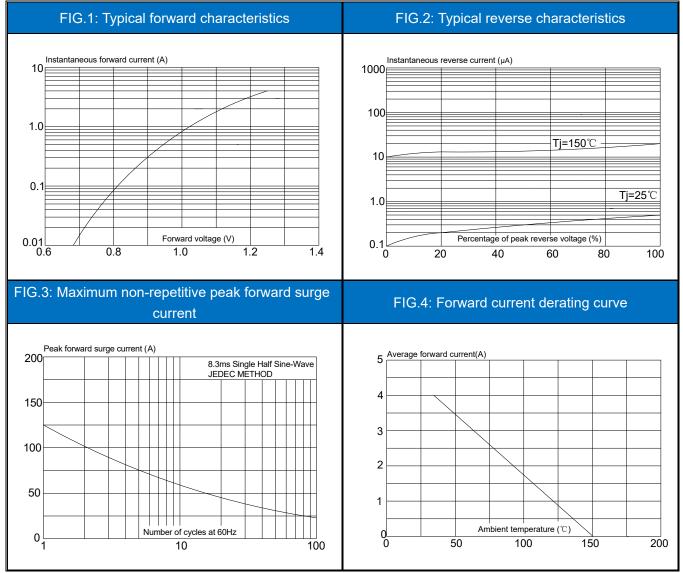


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PACKAGE INFORMATION-DO-27

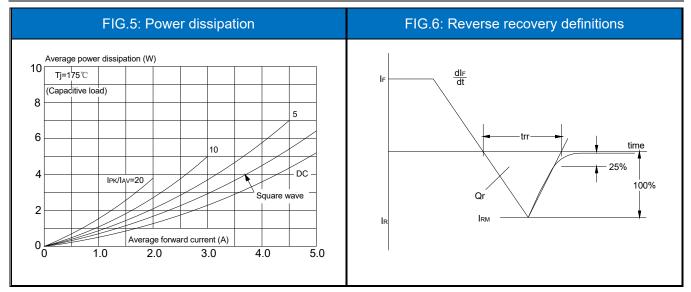
| OUTLINE | UNIT WEIGHT | INNER BOX | PER CARTON |
|---------|-------------|-----------|------------|
| | (g/PCS) TYP | (PCS) | (PCS) |
| Bulk | 1.142 | 1,000 | 10,000 |

CHARACTERITICS CURVE



JEFR0408G2

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