



JEER2004CCT EPI SUPERFAST RECOVERY RECTIFIER

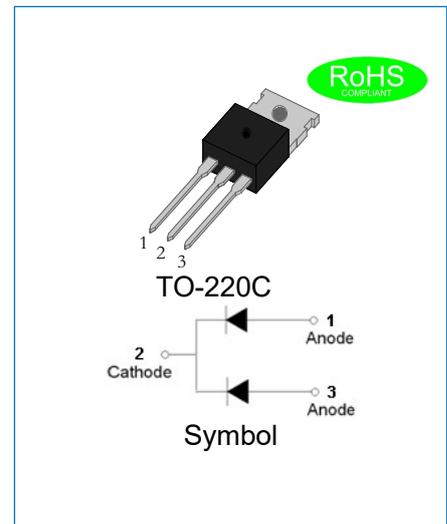
Rev.1.1

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

MECHANICAL DATA

- ✧ Case: TO-220C molded plastic over passivated junction
- ✧ Terminals: Solder plated, solderable per J-STD-002
- ✧ Weight:2.08gram



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

| Parameter | Symbol | JEER2004CCT | Unit |
|---|----------------|-------------|------|
| Maximum repetitive peak reverse voltage | V_{RRM} | 400 | V |
| Maximum RMS voltage | V_{RMS} | 280 | V |
| Maximum DC blocking voltage | V_{DC} | 400 | V |
| Maximum average forward current at $T_C=100^\circ\text{C}$ | $I_{F(AV)}$ | 20 | A |
| Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load(per diode) | I_{FSM} | 150 | A |
| Junction temperature and storage temperature range | T_j, T_{stg} | -55 to +150 | °C |

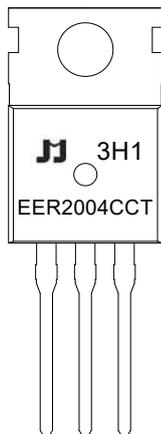
ELECTRICAL CHARACTERISTICS (Rating at 25°C case temperature unless otherwise specified.)

| Parameter | Symbol | Min. | Typ. | Max. | Unit |
|--|----------|-------------------------|------|------|---------------|
| Forward voltage $I_F=10\text{A}, T_j=25^\circ\text{C}$ | V_F | - | - | 1.3 | V |
| Maximum DC reverse current at rated DC blocking voltage | I_R | $T_j=25^\circ\text{C}$ | - | 5 | μA |
| | | $T_j=150^\circ\text{C}$ | - | 200 | |
| Reverse recovery time $I_F=0.5\text{A}, I_R=1\text{A}, I_{rr}=0.25\text{A}$ | t_{rr} | - | - | 35 | ns |

THERMAL RESISTANCES

| Symbol | Parameter | Min. | Typ. | Max. | Unit |
|---------------|--|------|------|------|------|
| $R_{th(j-c)}$ | Thermal resistance from junction to case | - | 2.0 | - | °C/W |

MARKING



| | |
|-----|----------------------------------|
| EER | EPI Superfast Recovery Rectifier |
| 20 | $I_{F(AV)}=20A$ |
| 04 | $V_{RRM}: 400V$ |
| C | Package: TO-220C |
| CT | Common cathode |

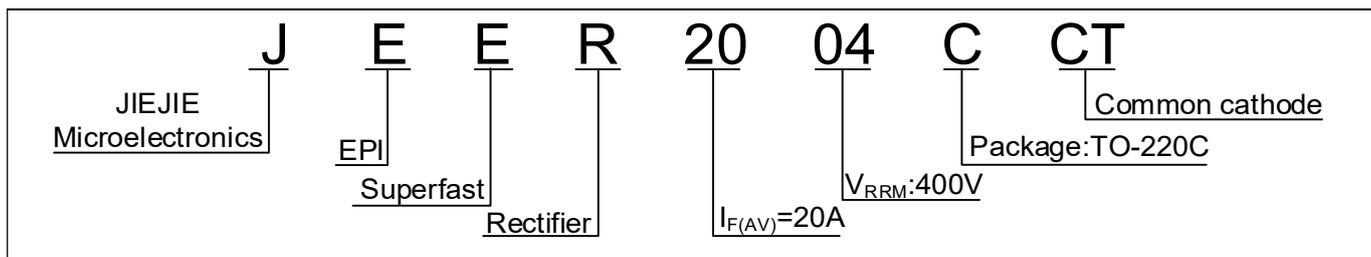
xH1: Month, 1、2、3 ~ 9、A、B、C

3x1:

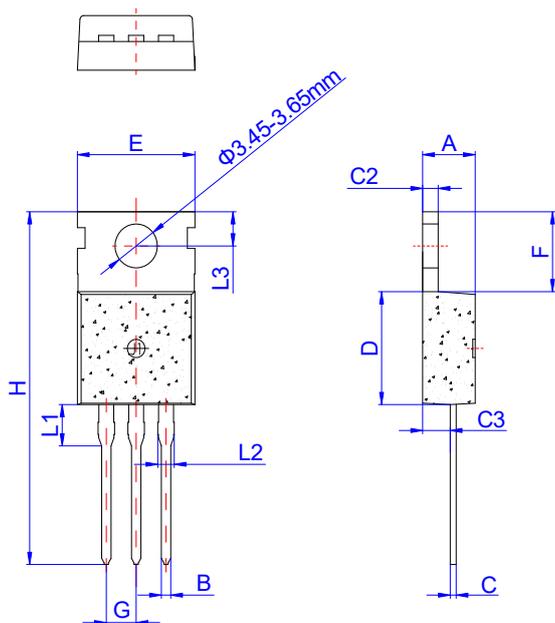
| | | | | | | |
|------|------|------|------|------|------|------|
| 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
| H | I | J | K | L | M | N |
| 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | ... |
| O | P | Q | R | S | T | ... |

3Hx: Batch number

ORDERING INFORMATION



PACKAGE MECHANICAL DATA



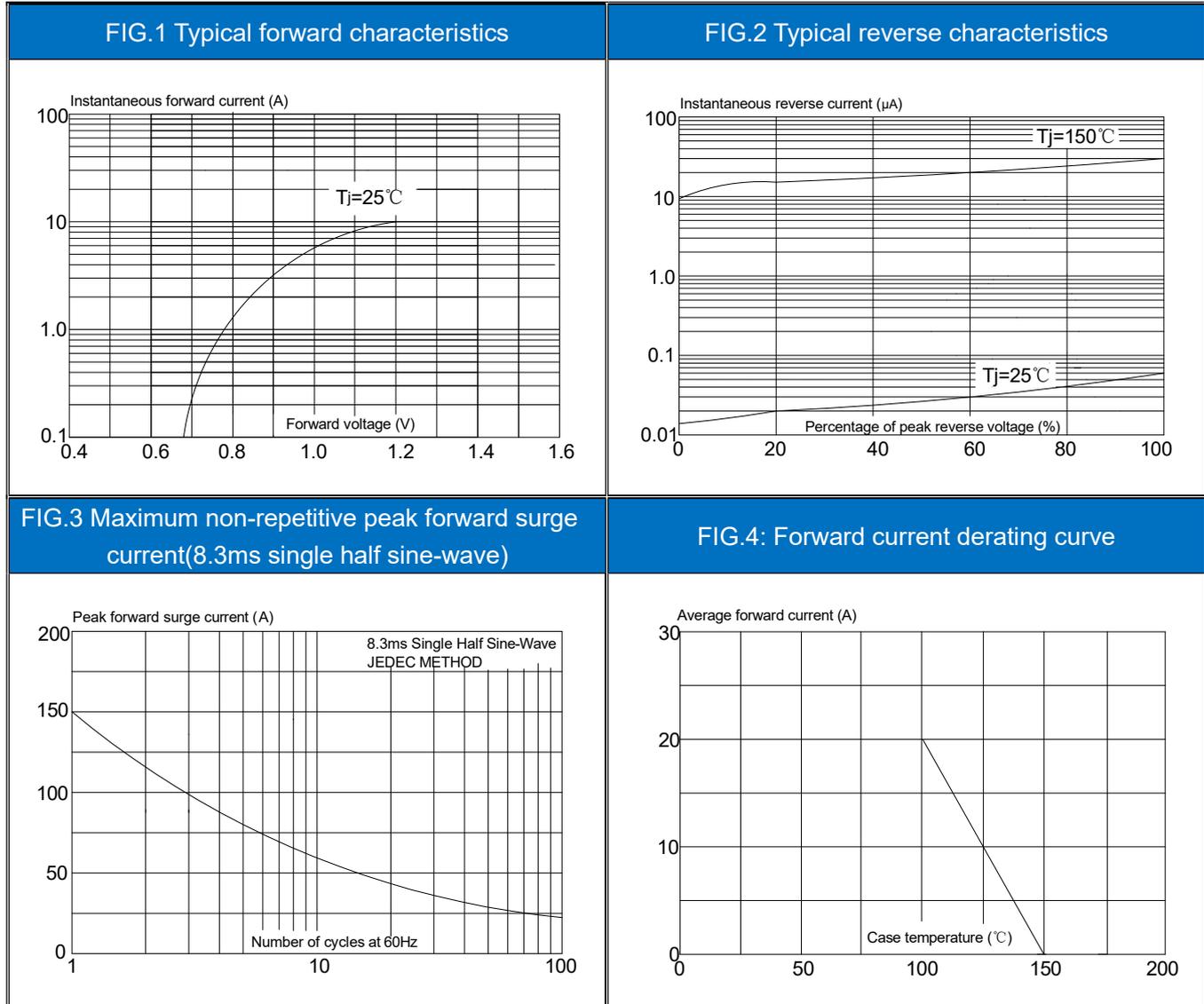
TO-220C

| Ref. | Dimensions | | | | | |
|------|-------------|------|------|--------|-------|-------|
| | Millimeters | | | Inches | | |
| | Min. | Typ. | Max. | Min. | Typ. | Max. |
| A | 4.40 | | 4.60 | 0.173 | | 0.181 |
| B | 0.70 | | 0.90 | 0.028 | | 0.035 |
| C | 0.45 | | 0.60 | 0.018 | | 0.024 |
| C2 | 1.23 | | 1.32 | 0.048 | | 0.052 |
| C3 | 2.20 | | 2.60 | 0.087 | | 0.102 |
| D | 8.90 | | 9.90 | 0.350 | | 0.390 |
| E | 9.90 | | 10.3 | 0.390 | | 0.406 |
| F | 6.30 | | 6.90 | 0.248 | | 0.272 |
| G | | 2.54 | | | 0.1 | |
| H | 28.0 | | 29.8 | 1.102 | | 1.173 |
| L1 | | 3.39 | | | 0.133 | |
| L2 | 1.14 | | 1.70 | 0.045 | | 0.067 |
| L3 | 2.65 | | 2.95 | 0.104 | | 0.116 |
| Φ | | 3.6 | | | 0.142 | |

PACKAGE INFORMATION-TO-220C

| OUTLINE | UNIT WEIGHT (g/PCS) typ. | TUBE (PCS) | PER CARTON (PCS) |
|---------|-----------------------------|---------------|---------------------|
| TUBE | 2.08 | 50 | 5,000 |

CHARACTERISTICS CURVE



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