



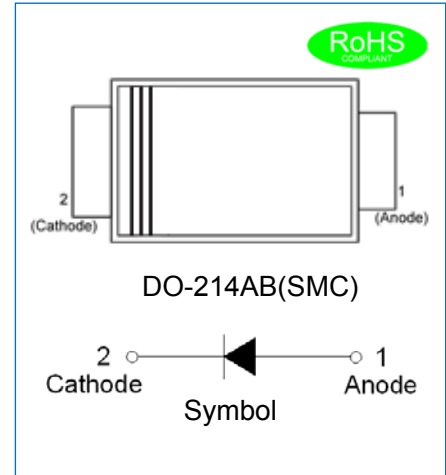
JEFR0308SC

EPI FAST SOFT RECOVERY RECTIFIER

Rev.1.0

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



MECHANICAL DATA

- ✧ Case: JEDEC DO-214AB molded plastic
- ✧ Terminals: Solder plated, solderable per J-STD-002
- ✧ Weight:0.26gram

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

| Parameter | Symbol | JEFR0308SC | Unit |
|--|----------------|-------------|------|
| Maximum repetitive peak reverse voltage | V_{RRM} | 800 | V |
| Maximum RMS voltage | V_{RMS} | 560 | V |
| Maximum DC blocking voltage | V_{DC} | 800 | V |
| Maximum average forward current | $I_{F(AV)}$ | 3.0 | A |
| Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load | I_{FSM} | 125 | A |
| Operating junction and storage temperature range | T_j, T_{stg} | -55 to +175 | °C |

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

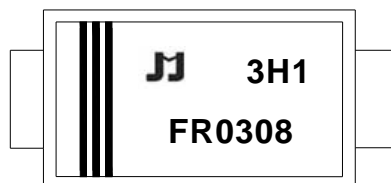
| Parameter | Symbol | Min. | Typ. | Max. | Unit |
|---|----------|-------------------|------|------|---------|
| Maximum forward voltage @ $I_F=3A$ | V_F | - | - | 1.7 | V |
| Maximum DC reverse current at rated DC blocking voltage | I_R | $T_j=25^\circ C$ | - | 5 | μA |
| | | $T_j=150^\circ C$ | - | 200 | |
| Maximum reverse recovery time | t_{rr} | - | - | 75 | ns |

THERMAL RESISTANCES

| Symbol | Parameter | JEFR0308SC | Unit |
|---------------|------------------|------------|------|
| $R_{th(j-L)}$ | Junction to lead | 15 | °C/W |

Note1: Thermal resistance from junction to lead mounted on P.C.B. with 8.0 mm x 8.0 mm copper pad areas.

MARKING



| | |
|----|-------------------------|
| FR | Fast Recovery Rectifier |
| 03 | $I_{F(AV)}=3A$ |
| 08 | $V_{RRM}:800V$ |

xH1: Month, 1、2、3 ~ 9、A、B、C

3x1:

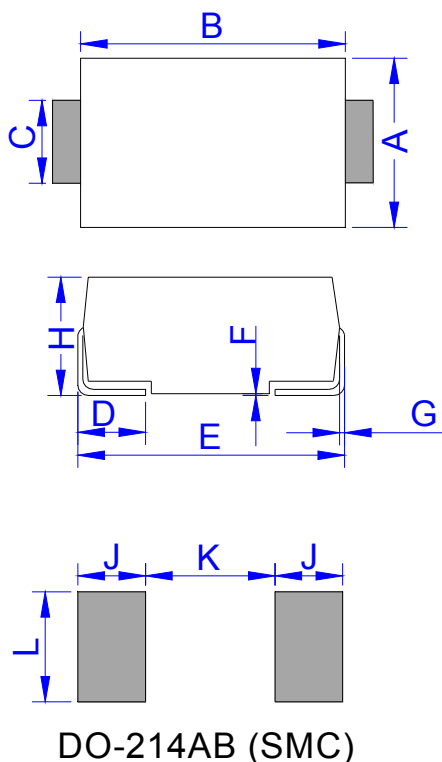
| | | | | | | |
|------|------|------|------|------|------|------|
| 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
| H | I | J | K | L | M | N |
| 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | ... |
| O | P | Q | R | S | T | ... |

3Hx: Batch number

ORDERING INFORMATION

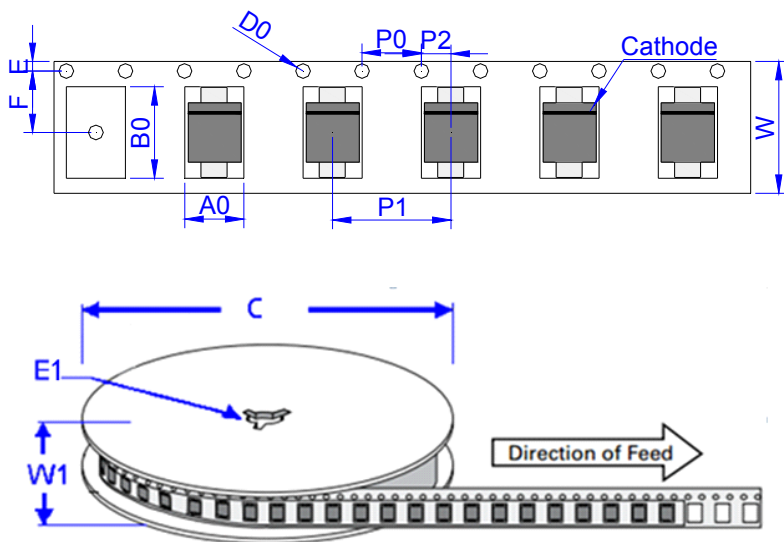
| | | | | | | |
|--|-----------------|------------------|-----------------------|-----------------------------|-----------------------------|--------------------------|
| J JIEJIE Microelectronics | E Epi | F Fast | R Rectifier | 03 $I_{F(AV)}=3A$ | 08 $V_{RRM}:800V$ | SC Package:SMC |
|--|-----------------|------------------|-----------------------|-----------------------------|-----------------------------|--------------------------|

PACKAGE MECHANICAL DATA



| Ref. | Dimensions | | | |
|------|-------------|-------|--------|-------|
| | Millimeters | | Inches | |
| | Min. | Max. | Min. | Max. |
| A | 5.75 | 6.25 | 0.226 | 0.246 |
| B | 6.90 | 7.40 | 0.272 | 0.291 |
| C | 2.75 | 3.25 | 0.108 | 0.128 |
| D | 0.95 | 1.52 | 0.037 | 0.060 |
| E | 7.70 | 8.20 | 0.303 | 0.323 |
| F | 0.051 | 0.203 | 0.002 | 0.008 |
| G | 0.15 | 0.31 | 0.006 | 0.012 |
| H | 2.15 | 2.62 | 0.085 | 0.103 |
| J | 2.40 | | 0.094 | |
| K | | 4.20 | | 0.165 |
| L | 3.30 | | 0.130 | |

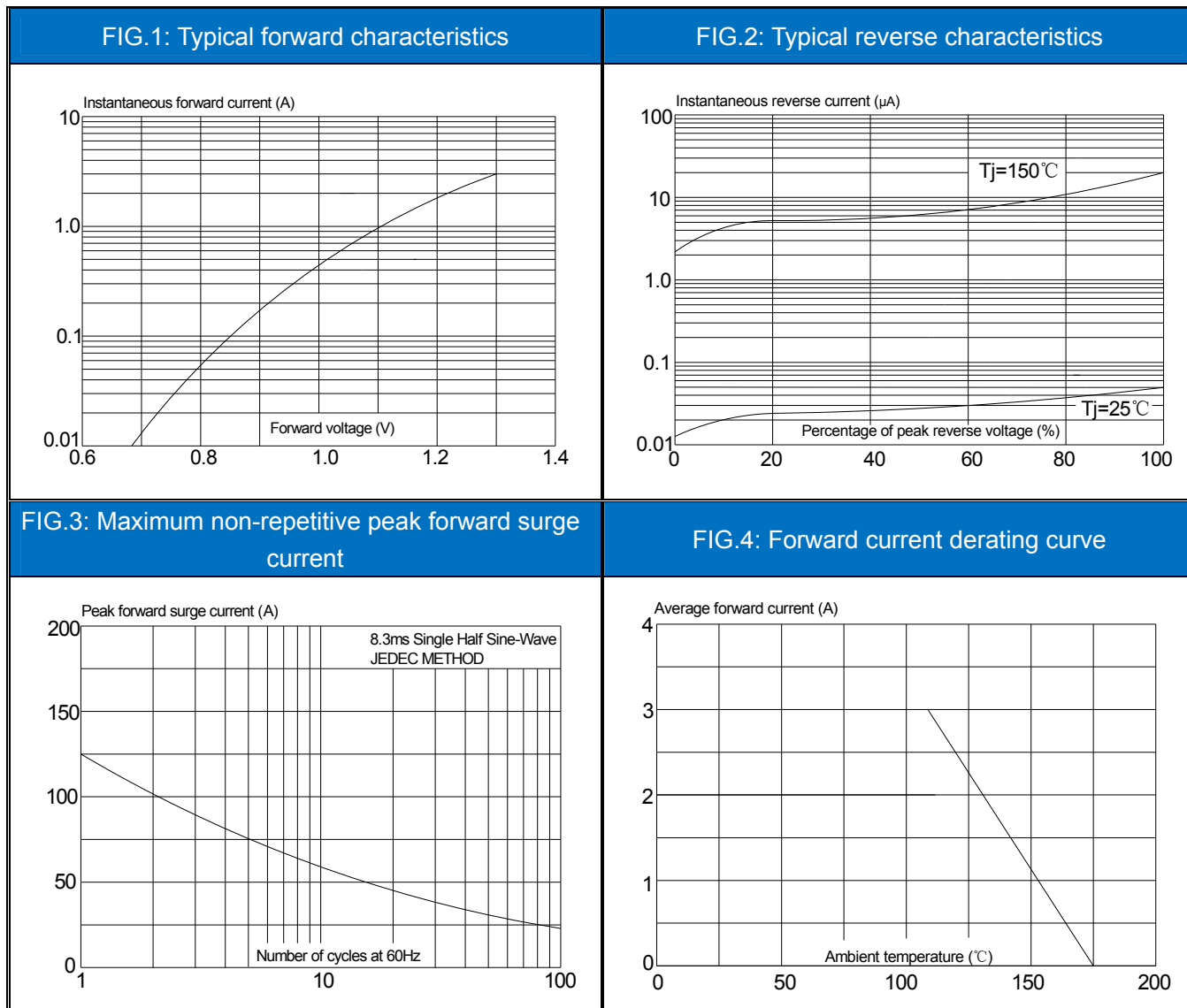
TAPE AND REEL SPECIFICATION-SMC



| Ref. | Dimensions | |
|------|-------------|----------------|
| | Millimeters | Inches |
| A0 | 6.05 ± 0.3 | 0.238 ± 0.012 |
| B0 | 8.31 ± 0.3 | 0.327 ± 0.012 |
| C | 330.0 | 13.0 |
| D0 | 1.55 ± 0.1 | 0.061 ± 0.004 |
| E | 1.75 ± 0.2 | 0.069 ± 0.008 |
| E1 | 13.3 ± 0.3 | 0.524 ± 0.012 |
| F | 7.50 ± 0.2 | 0.295 ± 0.008 |
| P0 | 4.00 ± 0.2 | 0.157 ± 0.008 |
| P1 | 8.00 ± 0.2 | 0.3145 ± 0.008 |
| P2 | 2.00 ± 0.2 | 0.079 ± 0.008 |
| W | 16.0 ± 0.2 | 0.630 ± 0.008 |
| W1 | 19.7 ± 2.0 | 0.776 ± 0.079 |

| OUTLINE | UNIT WEIGHT (g/PCS) typ. | REEL (PCS) | PER CARTON (PCS) | REEL DIAMETERS (mm) |
|---------|--------------------------|------------|------------------|---------------------|
| TAPING | 0.26 | 3,000 | 48,000 | 330 |

CHARACTERISTICS CURVE




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