

Efficiency Fast Recovery Rectifiers

REVERSE VOLTAGE - 200 Volts FORWARD CURRENT - 3 Amperes

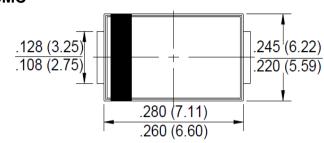
FEATURES

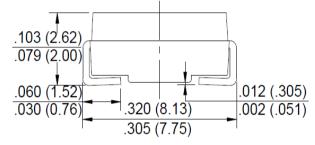
- Glass passivation pallet chip Junction.
- Ideal for automated placement
- Ultrafast recovery times for high efficiency.
- ●Low forward voltage, low power losses
- High forward surge capability
- ●Comply with AEC-Q101

MECHANICAL DATA

- Case: SMC, molded plastic
- Epoxy: UL flammability classification rate 94V-0.
- Terminals: Lead free plating (Tin finish).-Solderable per MIL-STD-202, Method 208.
- Polarity: Indicated by cathode band.
- Weight: 0.231 grams(approx.).

SMC





Dimensions in inches and (milimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Resistive or inductive load 60Hz.

For capacitive load, derate current by 20%

| Parameter | Symbol | ES3D | Unit |
|---|---------|-------------|------------------------|
| | Marking | EFM304C | |
| Max. repetitive peak reverse voltage | VRRM | 200 | V |
| Max. RMS voltage | VRMS | 140 | V |
| Max. DC blocking voltage | VDC | 200 | V |
| Max. average forward rectified current | lF | 3 | Α |
| Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method) | IFSM | 100 | А |
| Max. instantaneous forward voltage IF = 3A @ 25°C | VF | 0.9 | V |
| Max. DC reverse current at rated DC blocking voltage Ta=25°C Ta=100°C | lr | 10 500 | uA |
| Typical junction capacitance (Note 1) | CJ | 40 | pF |
| Max. reverse recovery time (Note 2) | Trr | 20 | ns |
| Typical thermal resistance | Rejc | 30 | °C/W |
| Operating Junction Temperature Range | TJ | -55 to +150 | $^{\circ}\!\mathbb{C}$ |
| Storage Temperature Range | Тѕтс | -55 to +150 | $^{\circ}$ C |
| N | | | - |

Notes: 1. Measured at 1.0MHZ and applied reverse voltage of 4.0V DC.

2. Measured with IF=0.5A, IR=1.0A, IRR=0.25A.



Fig.1 - Typical Forward Current **Derating Curve** 5.0 Average Forward Current, (A) 4.0 3.0 2.0 1.0 0 25 75 100 125 150 0 Case Temperature, (°C)

Fig.3 - Maximum Non-repetitive Forward Surge Current

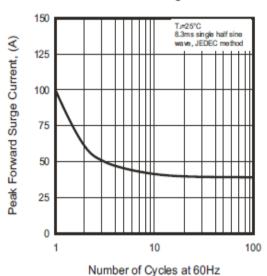


Fig.2 - Typical Forward Characteristics

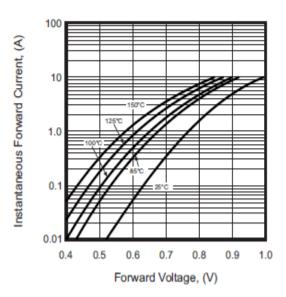


Fig.4 - Typical Reverse Characteristics

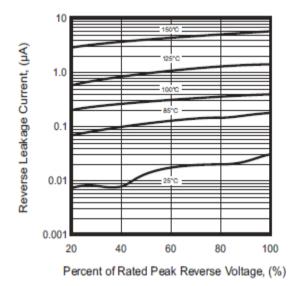
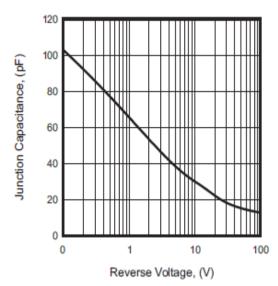


Fig.5 - Typical Junction Capacitance



The curve above is for reference only. 曲线图仅供参考。

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