

Product Overview

MBR120ESF: Schottky Power Rectifier, Surface Mount, 1.0 A, 20 V

For complete documentation, see the data sheet.

Using the Schottky Barrier principle with a large area metal-to-silicon power diode. Ideally suited for low voltage high frequency rectification or as free wheeling and polarity protection diodes in surface mount applications where compact size and weight are critical to the system. This package also provides an easy to work with alternative to the leadless 34 package style. Because of its small size, it is ideal for use in portable and battery powered products such as cellular and cordless phones, chargers, notebook computers, printers, PDAs and PCMCIA cards. Typical applications are ac/dc and dc/dc converters, reverse battery protection, and "ORing" of multiple supply voltages and any other application where performance and size are critical.

Features

- Guardring for Stress Protection
- Low Leakage
- 150 C Operating Junction Temperature
- Epoxy Meets UL94, VO at 1/8 inch
- Package Designed for Optimal Automated Board Assembly
- ESD Ratings: Machine Model = C, Human Body Model = 3B
- All Packages are Pb-Free
- NRVB Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q101 Qualified and PPAP Capable

Part Electrical Specifications

| Product | Compliance | Status | Configuration | V_{RRM} Min (V) | V_F Max (V) | I_{RM} Max (μ A) | $I_{O(rec)}$ Max (A) | I_{FSM} Max (A) | t_r Max (ns) | C_j Max (pF) | Package Type |
|---------------|---------------|--------|---------------|-------------------|---------------|-------------------------|----------------------|-------------------|----------------|----------------|--------------|
| MBR120ESFT1G | Pb-free | Active | Single | 20 | 0.53 | 10 | 1 | 40 | - | - | SOD-123FL |
| | Halide free | | | | | | | | | | |
| MBR120ESFT3G | Pb-free | Active | Single | 20 | 0.53 | 10 | 1 | 40 | - | - | SOD-123FL |
| | Halide free | | | | | | | | | | |
| NRVB120ESFT1G | AEC Qualified | Active | Single | 20 | 0.53 | 10 | 1 | 40 | - | - | SOD-123FL |
| | PPAP Capable | | | | | | | | | | |
| | Pb-free | | | | | | | | | | |
| | Halide free | | | | | | | | | | |
| NRVB120ESFT3G | AEC Qualified | Active | Single | 20 | 0.53 | 10 | 1 | 40 | - | - | SOD-123FL |
| | PPAP Capable | | | | | | | | | | |
| | Pb-free | | | | | | | | | | |
| | Halide free | | | | | | | | | | |

For more information please contact your local sales support at www.onsemi.com.

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