



Product Overview

MBRS540: Schottky Power Rectifier, Surface Mount, 5.0 A, 40 V

For complete documentation, see the data sheet

Product Description

This Schottky Rectifier employs the Schottky Barrier principle in a large area metal-to-silicon power diode. State-of-the-art geometry features epitaxial construction with oxide passivation and metal overlay contact. The Schottky Rectifier is 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.

Features

- Compact Surface Mountable Package with J-Bend leads
- Rectangular Package for Automated Handling
- Highly Stable Oxide Passivated Junction
- Excellent Ability to Withstand Reverse Avalanche Energy Transients
- Guardring for Stress Protection
- Cathode Lead Indicated by polarity Notch
- ESD Ratings, Machine Model = C, Human Body Model = 3B
- Device Meets MSL 1 Requirements
- Pb-Free Package is Available
- AEC-Q101 Qualified and PPAP Capable

Applications

- ac/dc and dc-dc Converters
- Reverse Battery Protection

Part Electrical Specifications

| Product | Compliance | Status | Configuration | V_{RRM} Min (V) | V_F Max (V) | I_{RM} Max (uA) | $I_{O(rec)}$ Max (A) | I_{FSM} Max (A) | t_r Max (ns) | C_j Max (pF) | Package Type |
|-------------|---|--------|---------------|-------------------|---------------|-------------------|----------------------|-------------------|----------------|----------------|--------------|
| MBRS540T3G | AEC Qualified Pb-free Halide free | Active | Single | 40 | 0.5 | 300 | 5 | 190 | | | SMC-2 |
| NRVBS540T3G | AEC Qualified PPAP Capable Pb-free Halide free | Active | Single | 40 | 0.5 | 0.3 | 5 | 190 | | | SMC-2 |

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

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