



## Product Overview

### TS12120MFS: Trench Schottky Rectifier, Low VF, 12 A, 120 V

For complete documentation, see the data sheet

#### Product Description

The NTS12120MFS and NTS12120EMFS devices are our new Low Forward Voltage and Low Leakage Trench-based Schottky Rectifiers. This new technology allows lower forward voltage drop without the high reverse leakage tradeoff experienced with planar schottky rectifiers. This platform also provides very stable switching characteristics over a wide temperature range and is an ideal output rectifier for switching power supplies.

#### Features

- Fine Lithography Trenchbased Schottky Technology for Very Low Forward Voltage and Low Leakage
- Fast Switching with Exceptional Temperature Stability
- Low Power Loss and Lower Operating Temperature
- Higher Efficiency for Achieving Regulatory Compliance
- Low Thermal Resistance
- High Surge Capability
- NRV Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q101 Qualified and PPAP Capable
- These are Pb-Free and Halide-Free Devices

#### Applications

- Switching Power Supplies including Notebook / Netbook Adapters, ATX and Flat Panel Display
- High Frequency and DC-DC Converters
- Freewheeling and OR-ing diodes
- Reverse Battery Protection
- LED Lighting

#### 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)	$t_{rr}$ Max (ns)	$C_j$ Max (pF)	Package Type
NRVTS12120MFST1G	AEC Qualified PPAP Capable Pb-free Halide free	Active		120	0.83	75	12	200			SO-8FL / DFN-5
NRVTS12120MFST3G	AEC Qualified PPAP Capable Pb-free Halide free	Active		120	0.83	75	12	200			SO-8FL / DFN-5
NTS12120MFST1G	AEC Qualified Pb-free Halide free	Active		120	0.83	75	12	200			SO-8FL / DFN-5
NTS12120MFST3G	AEC Qualified Pb-free Halide free	Active		120	0.83	75	12	200			SO-8FL / DFN-5

For more information please contact your local sales support at [www.onsemi.com](http://www.onsemi.com)

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