



New Product Fact Sheet

MUR2XX/MURS2XX – New Series of Ultra-Fast 2 AMP Rectifier

Overview

The new series of 2 amp ultrafast rectifiers signify the first series of 2 amp rectifiers created by ON Semiconductor, targeting power management in monitors, portable computers, networking and telecommunication applications. Referred to as the MUR2XX and MURS2XX series respectively, these rectifiers are now offered in the popular axial-leaded and SMB packages, extending ON Semiconductor's solutions for power management applications. Both series offer an optimal system trade-off between forward voltage drop (V_f) and reverse leakage (i_R) for 2 amp applications and an ultra-fast reverse recovery time (t_{rr}) range of 25 to 100 nanoseconds. Furthermore, all devices within these series have a high maximum operating junction temperature of 175° Celsius. The blocking voltages (V_R) range from 200 to 1000 volts, with additional parts in the 50 and 100 volt range to be offered in the coming months. The MUR2100E device offers excellent stability with guaranteed avalanche absorption (20 mJoules) capability. The 2 amp solutions are also a cost effective alternative to 3 amp rectifiers housed in similar packages. Other uses include automotive and motor control applications.

Features

- Ultra-Fast Recovery Time Range From 25-100 Nanoseconds
- 175°C Operating Junction Temperature
- Low Forward Voltage
- Low Leakage Current
- Small Compact Surface Mountable Package With J-Bend Leads (SMB Package)
- Rectangular Package for Automated Handling (SMB Package)
- High Temperature Glass Passivated Junction
- Low Forward Voltage Drop (Range: 0.77- 1.20 Volts Max @ 2.0 Amps, T_J 150°C)
- Improved Reverse Switching Characteristics
- Excellent Protection Against Voltage Transients in Switching Inductive Load Circuits (1000 Volt Device)
- Improved Reverse Switching Characteristics

Benefits

- Multiple Packaging Options, Surface Mount and Through-Hole
- Improved System Efficiency for 2 Amp Applications
- Small SMB Package Saves Board Space and Design Costs
- Improved Reliability Due to Low Recovery Time
- Additional Solution for 2 Amp Applications

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Applications

- Computer Monitors
- Desktop Power Supply
- Uninterrupted Power Supply
- Motor Controllers
- SWITCHMODE™ Power Supply
- Television Display
- Telecom Power and Switching Applications

Ordering Information

Part Number	Package	Temp. Range
MUR220	DO-41	-65°C to +175°C
MUR240	DO-41	-65°C to +175°C
MUR260	DO-41	-65°C to +175°C
MUR2100E	DO-41	-65°C to +175°C
MURS260T3	SMB	-65°C to +175°C
MURS230T3	SMB	-65°C to +175°C
MURS240T3	SMB	-65°C to +175°C
MURS220T3	SMB	-65°C to +175°C

Literature

A complete data sheet containing full specifications, is available through ON Semiconductor's Literature Distribution Center or at onsemi.com/pub/2amprectifiers

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German Phone: (+1) 303-308-7140 (Mon-Fri 2:30pm to 7:00pm CET)
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Spanish Phone: 303-308-7143 (Mon-Fri 8:00am to 5:00pm MST)
Email: ONlit-spanish@hibbertco.com

ASIA/PACIFIC: LDC for ON Semiconductor - Asia Support

Phone: 303-675-2121 (T-F 9:00am to 1:00pm Hong Kong Time)
Toll Free from Hong Kong & Singapore:
001-800-4422-3781
Email: ONlit-asia@hibbertco.com

JAPAN: ON Semiconductor, Japan Customer Focus Center
4-32-1 Nishi-Gotanda, Shinagawa-ku, Tokyo, Japan 141-0031
Phone: 81-3-5740-2700
Email: r14525@onsemi.com

ON Semiconductor Website: <http://onsemi.com>

For additional information, please contact your local Sales Representative