

new products & solutions:

View online: www.centrasemi.com/featured-products

Central
Semiconductor

Rethink the Possibilities™

Super Junction MOSFETs 650V | 4.7A, 7.3A, 10A, 13.8, 29A

Features:

- Low on-resistance relative to V_{DS} maximum
- High blocking voltage
- Fast switching speeds

Applications:

- Electric vehicle inverters
- Solar power inverters
- Power Factor Correction (PFC)
- Switch Mode Power Supplies (SMPS)

Benefits:

- Low switching losses
- Innately high-reliability die design
- Increased power output

CDMSJ2204.7-650
CDMSJ2207.3-650
CDMSJ22010-650
CDMSJ22013.8-650
CDMSJ22029-650



TO-220FP

Learn more: www.centrasemi.com/featured-products/super-junctions

Gallium Nitride N-Channel FETs: 100V | 60A or 650V | 11A, 17A

Features:

- High voltage capability (650V)
- Low gate charge & $r_{DS(ON)}$ (as low as 3.2mΩ)
- Efficient fast switching
- Space-saving DFN and CSP
- Also available as bare die

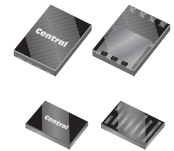
Applications:

- High power wireless charging (defense/aerospace, healthcare, consumer)
- Power Factor Correction (PFC)
- Electric vehicle inverters

Benefits:

- Minimal power loss in conduction
- High frequency switching capability
- No reverse recovery losses

CDF56G6511N-650
CDF56G6517N-650
CCSPG1060N-100



DFN & CSP

*CDFG6511N-650, CDFG6517N-650, CCSPG0420N-40 available upon request. (40V | 20A, 50A)

Learn more: www.centrasemi.com/featured-products/ganfets

Hyperfast Rectifiers: 600V | 15/30A, 30/60A

Features:

- High voltage capability
- Dual diode for high current capability
- Low t_{rr} (as low as 30ns)
- Backside pad for thermal efficiency

Applications:

- Flyback diode for:
- Power Factor Correction (PFC)
 - Continuous Conduction Mode (CCM)
 - Switch Mode Power Supplies (SMPS)

Benefits:

- Energy efficiency
- Industry standard package
- Low switching losses
- Ideal for use with Super Junction MOSFETs

CRU24715-600
CRU24730-600



TO-247

Learn more: www.centrasemi.com/featured-products/dual-diode-rectifiers-cru-series

require a
custom solution?

Just
Ask

Capabilities include:

- custom device development
- up-screening capabilities for high-rel applications
- Super Industrial™ & Spacelite™ devices for extreme environments

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Spacellite & Spacellite-Commercial 10 kRad N-Channel MOSFETs: 225V | 11A

Spacellite (Certified): CSLLDM22011-225F

These COTS devices are qualified and certified to NASA PEM-INST-001; meet radiation specifications ideal for LEO applications at reduced cost; and, meet exceptionally high quality and reliability standards.

Spacellite-Commercial: CSLCDM22011-225F

These COTS devices are qualified to Central's Spacellite standards and meet radiation specifications ideal for LEO applications at a reduced cost, while also meeting exceptionally high quality and reliability standards.

Benefits:

- Meet radiation specifications ideal for LEO (low earth orbit)
- High voltage capability
- Low gate charge ($Q_g = 4.45\text{nC TYP}$)
- Low $r_{DS(ON)}$ ($0.3\Omega \text{ TYP}$)

CSLLDM22011-225F



RADIATION TESTING BY
TROXEL

TO-220FP

Learn more: www.centrasemi.com/featured-products/space-grade-mosfets

Current Limiting Diodes in low profile DFN123F package

Features:

- Constant current range
- Wide operating voltage
- High input impedance
- Low profile DFN123F package
- Bare die available, please consult

Applications:

- LED lighting strings
- Light dimming systems
- Alarm systems
- On/off indicators
- Differential amplifiers

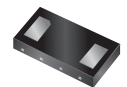
Benefits:

- Energy efficiency
- Space-savings
- Replacement for current limiting resistors
- Active current source performance

CMJDH080 Series
CMJDO130 Series



Top View



Bottom View

DFN123F

Learn more: www.centrasemi.com/featured-products/36

Current Limiting Diodes: Zero temperature coefficient, regulator current 27.5mA-575mA

Features:

- Constant current range
- Temperature independence
- High stability over wide temperature range
- Nominal current regulation at low voltage input

Applications:

- High intensity lighting systems
- Infrastructure lighting systems
- LED drivers
- Light dimming systems
- Test/measurement equipment

Benefits:

- Eliminates need for additional resistors
- Active current source performance
- Optimized for heat dissipation

CDCLD025 Series
CDCLD200 Series



DPAK

Learn more: www.centrasemi.com/featured-products/35

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Transient Voltage Suppressors: High voltage, 3kA, 12V-380V | 6kA, 42V-240V

Features:

- Very low clamping voltage (as low as 28V)
- Bi-directional TVS
- ESD protection of data lines in accordance with IEC 61000-4-2

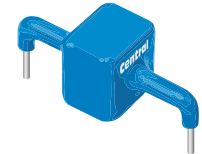
Applications:

- 5G telecom power supplies
- High power surge protection

Benefits:

- Energy efficiency
- Glass passivated chip for optimum reliability
- Wide voltage range

CAK3-012C Series
CAK6-042C Series



AK

Learn more: www.centrasemi.com/featured-products/34

Bridge Rectifier: High voltage, low profile, 4A | 1000V

Features:

- High 4.0A current rating
- Low V_F Diodes (1.0V MAX @ $I_F=4.0A$)
- DFN style package

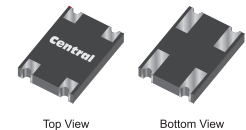
Applications:

- Consumer & I/S/M built-in power supplies (low profile)
- Consumer & I/S/M fast chargers (low profile)

Benefits:

- Energy efficiency
- Space-savings
- Exceptionally low profile package (1.55mm)
- RoHS and REACH compliant

CBRDFA4-100



Top View

Bottom View

BR DFN-A

Learn more: www.centrasemi.com/featured-products/31

Current Limiting Diode: Adjustable from 50mA-80mA | 50V

Features:

- Constant current range
- Adjustable regulation to 80mA
- Wide operating voltage
- Negative temperature coefficient for LED protection

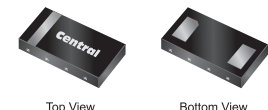
Applications:

- LED lighting and displays
- AC lighting panels
- Decorative lighting
- Test and measurement equipment

Benefits:

- Eliminates need for additional regulation
- Space savings
- Low profile package
- RoHS and REACH compliant

CMJA5050



Top View

Bottom View

DFN123F

Learn more: www.centrasemi.com/featured-products/28

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