



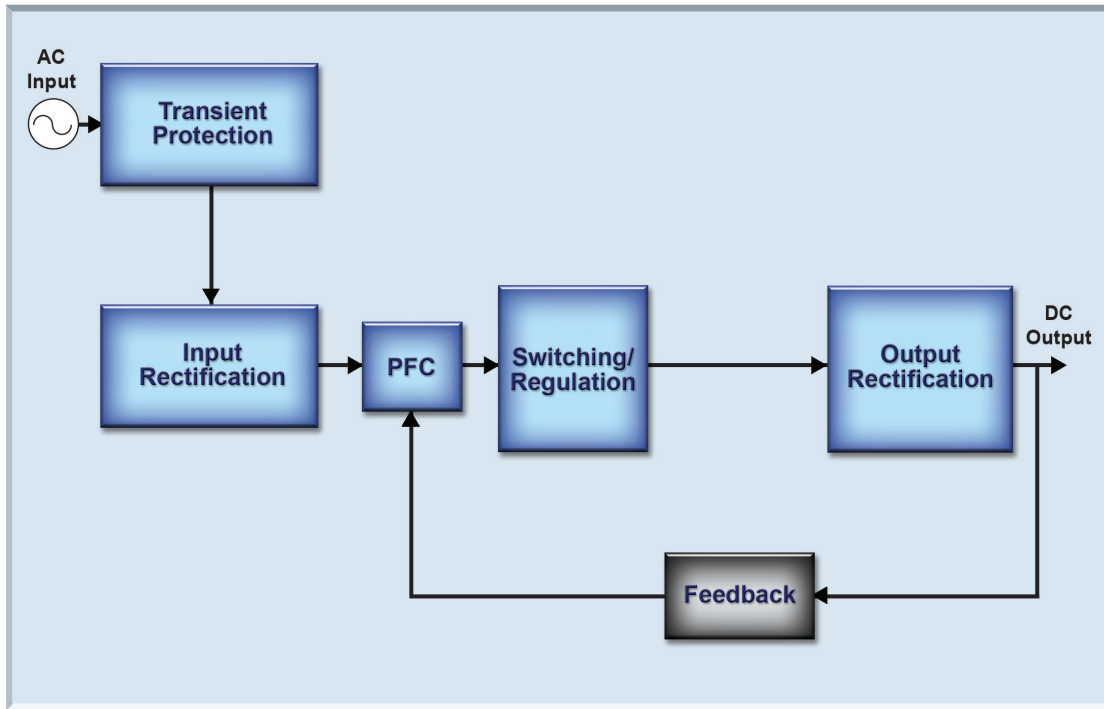
AC-DC Switch Mode Power Supply with PFC



Effective Power Factor Correction (PFC) designs require low loss, fast switching semiconductor components. Central Semiconductor Corp. manufactures a deep and wide portfolio of highly efficient MOSFETs, Hyperfast rectifiers and a host of other discrete components ideally suited for today's demanding PFC designs.

For more information visit: www.centrasemi.com/applications




AC-DC SMPS with PFC Topology



Transient Protection

• Transient Voltage Suppressors (TVS)







-  1SMC170CA: 170V, 1500W, bi-directional (SMC)
-  3SMC170CA: 170V, 3000W, bi-directional (SMC)
-  - P6KE350CA: 332V (stand-off), 600W, bi-directional TVS suitable for 220V power sources (DO-15)

Input Rectification

• Bridge Rectifiers Full-Wave



-  -CBRDFA4-100 4A, 1000V (BR DFN-A)
-  CBR6-060: 6A, 600V (CM)
-  CBR10-J060: 10A, 600V (CM)
-  -CBR25-060P: 25A, 600V (FP)











Industrial

AC-DC Switch Mode Power Supply with PFC

Power Factor Correction (PFC)




• MOSFETs



-  CDM4-600LR: 4A, 600V, Low $r_{DS(ON)}$ N-Channel UltraMOS™ (DPAK)
-  CDM7-600LR: 7A, 600V, Low $r_{DS(ON)}$ N-Channel UltraMOS™ (DPAK)
-  CDM22011-600LRFP: 11A, 600V, Low $r_{DS(ON)}$ N-Channel UltraMOS™ (TO-220FP)
-  CDM4-650: 4A, 650V N-Channel (DPAK)
-  CDM7-650: 7A, 650V N-Channel (DPAK)
-  CDM22010-650: 10A, 650V N-Channel (TO-220)
-  CDM2205-800FP: 5A, 800V N-Channel (TO-220FP)
-  CDM2208-800FP: 8A, 800V N-Channel (TO-220FP)

• Hyperfast Rectifiers








-  CMR5H-06: 5A, 600V, 20ns (SMC)
-  CHD8-06: 8A, 600V, 22ns (DPAK)
-  CTLHR10-06: 10A, 600V, 22ns (TLM364)

Switching / Regulation




• MOSFETs



-  CDM4-600LR: 4A, 600V, Low $r_{DS(ON)}$ N-Channel UltraMOS™ (DPAK)
-  CDM7-600LR: 7A, 600V, Low $r_{DS(ON)}$ N-Channel UltraMOS™ (DPAK)
-  CDM22011-600LRFP: 11A, 600V, Low $r_{DS(ON)}$ N-Channel UltraMOS™ (TO-220FP)
-  CDM2205-800FP: 5A, 800V N-Channel (TO-220FP)
-  CDM2208-800FP: 8A, 800V N-Channel (TO-220FP)

• Hyperfast Rectifiers








-  CMR5H-06: 5A, 600V, 20ns (SMC)
-  CHD8-06: 8A, 600V, 22ns (DPAK)
-  CTLHR10-06: 10A, 600V, 22ns (TLM364)

Output Rectification

• Schottky Rectifiers



-  CSHD12-60C: 12A, 60V, Dual Common Cathode (DPAK)
-  CZSH10-40C: 10A, 40V, Dual Common Cathode (SOT-223)
-  CTLSH10-45M364: 10A, 45V, Single (TLM364)
-  CTLSH15-60M364: 15A, 60V, Single (TLM364)
-  CRSH16D-40FP: 16A, 40V, Dual Common Cathode (TO-220FP)

• Silicon Carbide Schottky Rectifiers (bare die only)



- CPC08-SIC04-650: 4.0A, 650V
- CPC09-SIC06-650: 6.0A, 650V
- CPC10-SIC08-650: 8.0A, 650V
- CPC07-SIC10-650: 10A, 650V
- CPC15-SIC10-650: 10A, 650V*
- CPC11-SIC30-650: 30A, 650V
- CPC12-SIC02-1200: 2.0A, 1200V
- CPC05-SIC05-1200: 5.0A, 1200V
- CPC06-SIC10-1200: 10A, 1200V
- CPC14-SIC10-1200: 10A, 1200V*
- CPC13-SIC50-1200: 50A, 1200V

*CPC14 & CPC15 die processes feature Ni/Au top metallization; all other processes feature Al top metallization