

Why SiC for Welding Applications?

- Lower losses than IGBT solutions result in reduced thermal requirement
- Increased efficiency leads to lifelong savings by reducing operating costs
- Higher operating frequency allows for reduced size of inductors and capacitors
- More compact system with reduced overall size and weight

Custom Medium and High Power DC/AC Film Capacitors:

- Wide range of sizes, capacitance values and voltage ratings (up to 100KVdc)
- Design support for long lifetime/high ripple current products
- Ideal for longer life requirements in applications greater than 550VDC.

Extensive Thermal Capabilities:

- No other Wakefield-Vette distribution channel stocks more extrusions
- Quick turns on samples and smaller runs
- Comprehensive thermal analysis
- Complete fabricated heat sink support, including machining and plating
- Compact, high power density liquid cold plate solutions

DC Link Capacitors (Power Film & Aluminum Electrolytic):

Film: 100-3000Vdc, 0.001uF-2000uF

Terminal Type: screw, box, axial, board mount

Manufacturers: CDE / KEMET / Kendeil

Electrolytic: 3V-550Vdc, 1uF-270,000uF

Terminal Type: screw, snap, flatpack, radial, axial

Manufacturers: CDE / Illinois Capacitor / KEMET / Kendeil / UCC / Genteq

EMI/RFI Filter Products:

X1/X2 & Y1/Y2 Capacitors:

Film Cap: Up to 760Vac, 0.001uF-46uF

Terminal Type: box

Manufacturer: CDE / KEMET

Modules:

DC Filter: 75V-1200V, 3A-2500A at 150KHz

AC Filter: 250Vac-600Vac, 1A-2000A at 150KHz

Type: single phase, three phase (Delta/Wye), IEC INLET/PEM, medical, military, tempest, custom.

Manufacturer: Astrodyne TDI (Radius Power)

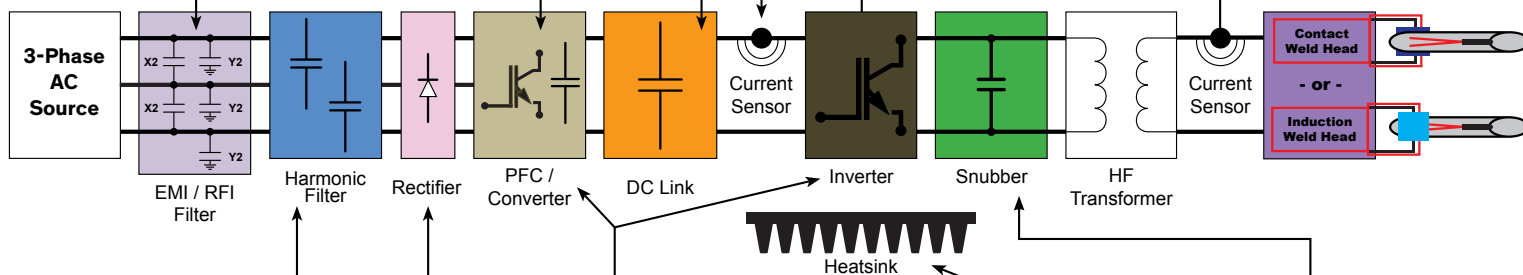
Power Factor Correction (PFC) Film Capacitors:

Oil Filled: 240Vac-1200Vac, 1.9uF-600uF

Output Type: single phase, three phase

Case: aluminum cylindrical case

Manufacturers: CDE / KEMET / Genteq



AC Filter/Harmonic Film Capacitors:

Oil-Filled: 240Vac-1200Vac, 1.5uF-600uF

Output Type: single phase, three phase

Case: aluminum cylindrical case

Manufacturers: CDE / KEMET / Genteq

Power Semiconductor Products:

SCR/Thyristor: 200V-8500V, 240A-6400A

IGBT/IPM/DIIPM: 250V-6500V, 4A-3600A

Diode/Rectifier/Module: 30V-9000V, <1A-8800A

HV Diode/Assy: 1000V-200kV, <1A-25A

SiC MOSFET/Module: 600V-1700V, 5A-1200A

SiC Diode/Module: 600V-1700V, 1A-50A

SiC/Si Hybrid Products: 500V-1700V, 15A-1200A

MOSFET/Module: 55V-1200V, 3.5A-640A

Manufacturers: Cree / Dynex / EDI / Microsemi / Powerex / Semikron / Vincotech

Power Resistors:

Axial lead, power controls, current sense, surface mount, heat sinkable, surge rated, high current/braking, tubular, high voltage

Manufacturer: Ohmite

Current Sensors:

Hall Effect-Open Loop 3A-1500A

Hall Effect-Closed Loop 2A-500A

Flux gate 6A-50A

Manufacturer: Tamura

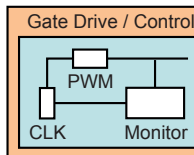
Gate Driver/Control:

Integrated Drivers
Plug-and-Play drivers

Manufacturers: Cree / Powerex / Power Integrations (CT Concept)

DC-DC Converters

Manufacturers: Powerex / Recom Power



Thermal Management:

Board level, extrusion, bonded fin, liquid cold plate, custom

Manufacturers: Aavid / DAU / Priatherm / Wakefield-Vette

Snubber Capacitors:

Film: 250V-3000Vdc, 0.015uF-400uF

Terminal Type: box, axial, direct-mount, oil-filled, cylindrical-dry film

Manufacturers: CDE / Genteq / Illinois Capacitor / KEMET / GE

- Global distribution with local presence
- Design support from prototype to production
- Latest products from market-leading suppliers

D = Discrete, M = Module

- Thermal Accessories include precision clamps, thermal interface material and wedgelocks.

VinaTechTommyDensitronCornell Dubilier (CDE)RECOMI POWER

RichardsonRFPD
An Arrow Company

NOTE: All of our supplier agreements are global except:
 * Powerex: North/South America, IGBTs, MOSFET Modules, Diode/Rectifier Modules.
 ** Maxwell: Americas, Asia-Pac (excluding Japan, Korea, Australia, New Zealand)
 NA=USA/Italy/Spain/Israel; Discrete SCR, Thyristor and Diode/Rectifier components.