



Specialist components & intelligent support for
harsh & high-end applications

Charcroft: Challenge Accepted

charcroft
50
ELECTRONICS

50 years of independant specialist support

www.charcroft.com

Passives, Power, Sensors, E-mech and more

Charcroft Electronics

As an independent specialist distributor of components for harsh and high-end applications, Charcroft provides intelligence-led technical and commercial support to customers in the most demanding sectors.

Intelligence-led specialist distribution

- Franchised by leading global and specialist manufacturers
- Exceptional knowledge of demanding applications
- Responsive to customers and open to innovation
- Expert support from field-based Product Specialists
 - Design-in, production, upgrades, legacy
- Simplifying procurement with intelligent quoting
- Custom IT and traceability systems
 - Export management including ITAR controls
 - Archiving all CofC & delivery notes
 - Library of legacy datasheets
- Key supplier to Defence OEMs for over 50 years



UK-based ISO9001: 2015 approved manufacturing facility

Film capacitor manufacture

- ClarityCap® polypropylene audio-capacitors manufactured in Wales, supplied worldwide to loudspeaker OEMs
- Industrial PP/PET film capacitors for DC-LINK, filtering & resonant circuits; matched capacitors for railway signalling
- Build to print or fully bespoke design, with a range of form-factors, termination and customisation options

VPG Approved Precision Centre

- 'Any value' Bulk Metal® & Z-foil resistors
- Precision Express® shipping in under 5 days
- Tolerance down to $\pm 0.005\%$
- Matched parts available (TCR + Tolerance)
- Bridge-Completion-Module (BCM) matched Resistors



In-house custom value add services

- Custom solutions for harsh applications
- Component customisation, labelling & printing
- In-house component screening
- Low-volume manual assembly
- 'Can do' approach to customer requests
- Liaison with third-party suppliers

Legacy passives

- Silver mica capacitors to 250°C : axial/radial to $\pm 0.5\text{pF}$
- Foil resistors to $\pm 0.005\%$ tolerance
- Radial ceramic capacitors to $\pm 1\%$ tolerance



Quality Approvals

Charcroft Electronics have a specifically focused Quality Department to ensure we are adhering to the highest industry standards.



Capacitors



Advance	Barker	Charcroft	Exxelia	ICW	Johanson	Kemet	Knowles	Ohmite	Quantic-UTC	Vishay
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TECHNOLOGY

Aluminium Electrolytic		✓		✓		✓				
Aluminium Polymer						✓				
Ceramic			✓	✓	✓	✓	✓		✓	
EDLC Supercap						✓		✓		
Film	✓		✓	✓	✓	✓				
Mica			✓	✓						
Polymer Tantalum				✓		✓				✓
Solid Tantalum				✓		✓				
Wet Tantalum				✓						✓

APPLICATIONS

High Stability			✓	✓	✓		✓	✓		
High Temperature		✓		✓		✓	✓	✓	✓	✓
High Vibration		✓		✓			✓	✓		✓
High Voltage		✓	✓	✓		✓	✓	✓	✓	
RF/Hi-Q		✓		✓			✓	✓		
Safety Rated X/Y							✓	✓		

Start with standard 2.5kV ceramic chip

Solder tabs to chip to match existing lead-pitch



Add a backplate for additional strength

Encapsulate to protect against moisture

Pot in epoxy resin for 25 year+ protection from ionising radiation



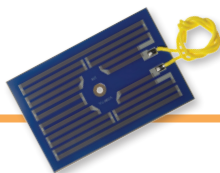
Magnetics, Filtering & RF



AEM	Cambion	Dectron	Exxelia	Kemet	Knowles	Vishay
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Coils & Windings		✓		✓		
Dielectric Resonators				✓		
EMC Filtering			✓	✓	✓	
Feed-Through Filter				✓	✓	
Ferrite Beads	✓	✓		✓	✓	
Ferrite & Ceramic Materials				✓	✓	
Inductors		✓		✓	✓	✓
Planar/Discoidal Capacitors					✓	
Transformers		✓		✓		
Trimmer Capacitors				✓		
Tuning Elements				✓		

Resistors



Chargcraft

Exxelia

Ohmite

State of the Art

TT Electronics

Vishay

VPG

TECHNOLOGY

Carbon/Ceramic Composition			✓		✓		
Foil	✓						✓
Metal Alloy					✓		
Networks/Divider		✓	✓		✓	✓	✓
Thick Film		✓	✓	✓	✓	✓	✓
Thin Film		✓	✓	✓	✓	✓	✓
Wirewound			✓		✓		✓

APPLICATION

Current Sense			✓		✓	✓	✓
High Temperature		✓			✓	✓	✓
High Voltage		✓	✓	✓	✓	✓	✓
Power		✓	✓	✓	✓	✓	✓
Precision & Stability	✓	✓	✓	✓	✓	✓	✓
Surge/High Energy		✓	✓		✓		

Power & Hi-Rel Semiconductors



MTM

PULS

AC-DC	✓	✓
Battery Charger	✓	
DC-DC	✓	✓
EN50155	✓	✓
Inverters		✓
3-phase AC Input		✓

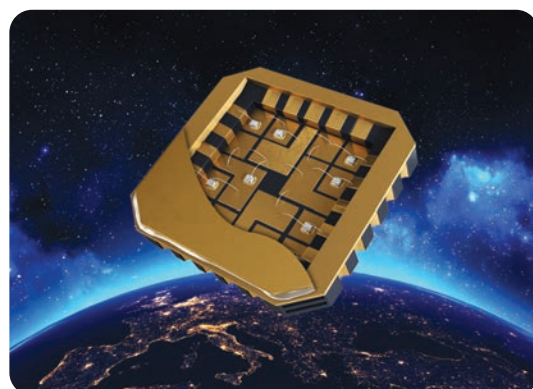


Euroquartz

TT Electronics

X-REL

Control IC			✓
Crystals & Oscillators	✓		
Diodes		✓	✓
IGBTs		✓	
IGBT Power Module		✓	
Multi-Chip Array		✓	
MOSFETs		✓	✓
Transistors		✓	✓



Circuit Protection, Thermal and Sensors

AEM Cambion Comair Rotron E-Switch Exxelia Fredericks Kemet Ohmite Sensata Sonitron TT Electronics Vishay VPG

CIRCUIT PROTECTION

Aircraft/MIL Breakers								✓				
Hydraulic Magnetic								✓				
Fuses	✓											
Thermal Circuit Breakers								✓				

THERMAL

Heatsinks							✓					
Fans, Blowers & Impellers			✓									
Thermal Cut Outs						✓		✓				
Thermostats & Probes								✓				

SENSORS

Load-Cells												✓
Position Sensors				✓				✓		✓	✓	
Pressure Sensors								✓		✓		
Pressure Switches								✓				
Strain-Gauges												✓
Temperature Sensors							✓	✓		✓		
Tilt Sensors					✓							

OTHER

Component Up-Screening	✓											
Contactors								✓				
Optoelectronics & Hall Effect										✓		
PCB Hardware & Interconnect		✓						✓				
Piezo Actuators						✓						
Pots, Trimmers & Rheostats							✓			✓	✓	✓
Relays						✓		✓				
Sounders									✓			
Solid State Relays								✓				
Switches				✓				✓				
Tin Whisker Mitigation	✓											

Approvals

AEM

Barker

Exxelia

Johanson

Kemet

Capacitors		MIL	CECC/MIL SPACE	MIL	MIL/AEC-Q UL/SPACE
Fuses & Ferrite Beads	MIL/SPACE				
Resistors			MIL/SPACE		

Knowles

Ohmite

Sensata

State of the Art

TT Electronics

Union Tech

Vishay

VPG

Capacitors	CECC/AEC-Q TÜV/UL					MIL	CECC/MIL	
Circuit Breakers			MIL/UL/VDE					
Opto & Hall Effect					MIL/UL/VDE/ ATEX/IECE _x			
Resistors		MIL		MIL	CECC/MIL UL/AEC-Q		UL	CECC/MIL SPACE
Thermostats			MIL/UL SPACE					

Franchises

Bringing together a mix of global leaders and specialist manufacturers, Charcroft's product range is focused on rugged components for harsh and high-end applications



Charcroft: Challenge Accepted



Passives, Power, Sensors, Emech and more

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Registered Office: Dol-y-coed, Llanwrtyd Wells, Powys LD5 4TH



Brands

Advance Components
Advanced Monolithic Ceramics
AEM
Alcon Electronics
Arcotronics
Ashcroft
ATC
Barker Microfarads
Bowmar-Bowtech
Caddock
Cambion
Charcroft
ClarityCap
ICW
Cinch Connectivity
Coast/ACM
Comair Rotron
Cornell Dubilier
Dectron
Dubilier
E-Switch
Euroquartz
Exxelia
Alcon
Dearborn
Eurofarad
Firadec
Microspire
N'Ergy
Ohmcraft
RAF Tabtronics
Sic-Safco
Temex
Fredericks Company
Gowanda
Greenray
Harwin
Johanson Dielectrics
Johanson Manufacturing
Kemet
Arcotronics
BHC Components
Evox Rifa
Sierra-KD
Token
Knowles Precision Devices
Dielectric Laboratories
Novacap
Syfer
Voltronics
LCR
Manutech
MFD
MPE
MTM Power
NEL Technologies
Ohmite
Maxcap
Ultronix
Oxley Developments
Phoenix Contact
Presidio
PULS

Quantic
Union Technology Corp.
RCD Components
Sensata Technologies
Airpax
BEI Kimco
BEI Sensors
Crydom
Cynergy3
DeltaTech
First Technology
Gigavac
Kavlico
Klixon
Sensor-NITE
Sonitron
Spectrum Control
Sprague Goodman
State of the Art
Statek
TAB Components
Thermtrol
Thin Film Technology
Tronser
TT Electronics
AB Connectors
Aero Stanrew
BI Technologies
IRC
Optek
Roxspur Measurement & Control
Semelab
Stontronics
Welwyn Components
Tusonix
Unilator
Vishay
Angstrom
Aztronic
BC Components
Beyschlag
Cera-Mite
Dale
Draloric
Electro Films
Geka
Mallory
Roederstein
Sfernice
Spectrol
Sprague
Tansitor
Techno
Thin Film
Vitramon
VPG Precision
Alpha Electronics
Micro-Measurements
Powertron
VPG Foil Resistors
VPG Force Sensors
Vitelec
X-REL Semiconductor