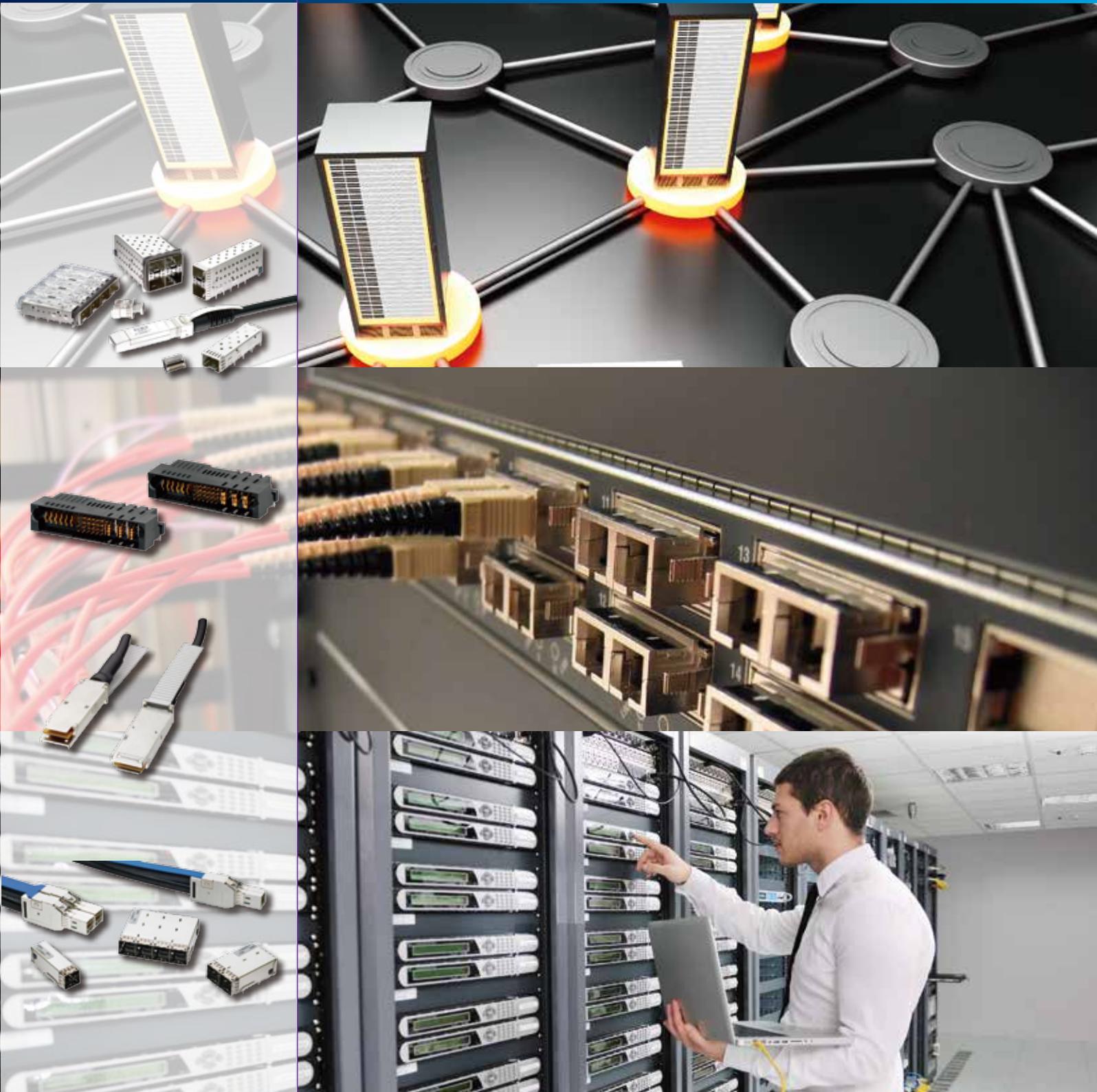




Data Communications

Line Card

www.ttiasia.com



The Global Specialist in Electronic Component Distribution

TTI Asia's Data Communications Business Unit

TTI Asia has a dedicated team of Sales Engineers and Datacom Field Application Engineers to offer you the most competitive products to meet your design requirements for today's need in high speed data communication, telecommunication infrastructure, wireless communications, smart metering, storage network and optical network.

TTI is the world leading specialist in connectors, passives, discrettes, relay and switch components. Providing innovative products including

- High speed backplane solutions
- Power solution
- High speed I/O (10G/40G/>100G)
- RF and wireless solutions
- Fiber optic solutions
- Active and passive cable assemblies

Whatever your datacom application is, TTI has a solution for you.

- Server/Router/Switch
- Power supply
- Smart grid communications
- Fiber optic products and optical transport networks
- Wireless communications
- Mass storage networks



Why Buy from TTI?

Founded in 1971, TTI steadily has grown to become the world's largest specialist distributor for Passive, Discrete, Connector and Electromechanical components. TTI ASIA is head-quartered in Singapore, with three dedicated ISO 9001:2008 certified warehouses located in Hong Kong, Shanghai and Singapore. TTI is well positioned to support Greater China and South Asia, with over 400 staff covering 24 locations in 12 countries.

Product Knowledgeable Experts

TTI has a team of specialists with more product experience and knowledge than any other distributor. All TTI employees participate in company-wide training programs, plus every one of our sales branches has a team of product managers on-site to provide the extra support that customers need. Through the years these exceptional specialists have become, and remained, the most knowledgeable in the electronic component industry.

Broader and Deeper Inventories

TTI maintains extensive inventories by stocking more than 500,000 parts with over 80% available for immediate delivery. That's more interconnect, passive, electro-mechanical, and discrete parts than from any other source. We remain committed to breadth and depth of inventory, ensuring availability of C and D class parts as well as commodity parts.

Leading Edge Technology Products

The manufacturers TTI partners with, are the companies that lead the industry in new component technologies. For customers, this means that TTI enlists the help of the manufacturers who can help solve any design challenge. Our product groups also focus on new product introductions to ensure we have the very latest and most technologically-advanced products readily available from stock.

Value Added Logistic Services

From technical application advice to customized logistical solutions; TTI can add value throughout the supply chain by reducing acquisition costs, improving material flow through forecast analysis, provide safety stock and reduce receipt handling through consolidated shipments. These are just some areas that TTI can review with your company to streamline your internal supply chain and help reduce hidden material costs.

Global Distribution Centers

TTI has more than 1.3 million square feet of automated warehousing in North America, Europe, and Asia. All are linked into a global warehouse management system that provides superior customer service and overall business efficiencies. Wherever you are in the world, TTI can support you.

Quality and Reliability

TTI has a passion for excellence, and after 40 years experience our on-time delivery and quality levels are the best in class. TTI implemented Total Quality Management in 1989 and have been ISO registered since 1993, we were the first distributor to have all of our global warehouse locations ISO registered and have since upgraded to ISO9001:2008. TTI has one global documentation system that ensures that every TTI branch and warehouse in the world follow the same processes. Year after year, customers rate our quality and management practices to be among the very best in the industry. This is especially important when the products are the typical high mix, low value parts on which we have built our reputation.

For more information contact:
FeedbackTTIAsia@ttiinc.com

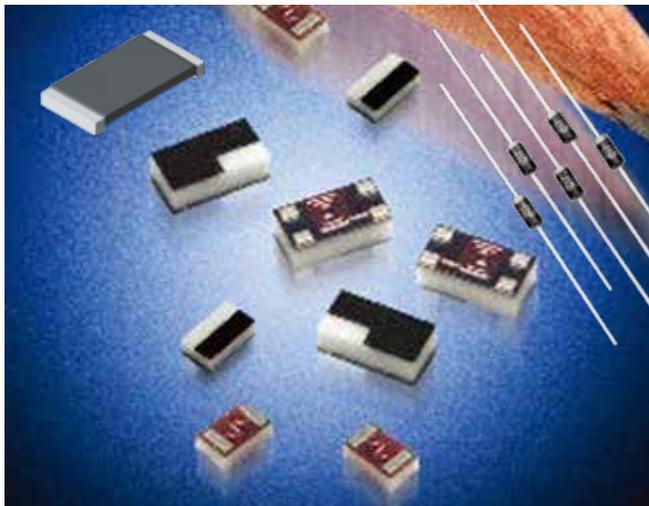
THE SPECIALIST

Authorized Distributor of These Manufacturers and Their Brands



Resistors

FILM	Manufacturers																		
	Bourns	KOA	OHMITE	Panasonic	Smiths Interconnect	TE Connectivity	TT Electronics	IRC	Welwyn	Vishay	Angstrom	BComponents	Dale	Electro-Films	Sfernice	Techno	Thin Film	Vishay Precision Group	Yageo
METAL FILM																			
Discrete Chip		●	◆	●	◆									●	◆		●	◆	
Flame Proof		●	◆			◆	●	◆	●	◆			●	◆	●	◆	●	◆	◆
Fusible	◆		◆		◆	●	◆	●	◆				◆		◆				◆
High Temp	◆	●	●	◆		●	●	◆	●	◆			●	◆	●	◆			◆
High Voltage		●	●	◆		◆	●	◆	●	◆			●	◆	●	◆			◆
Matched Sets			●			◆	◆	●	◆	●			●	◆	●	◆		●	◆
Melf /Cylindrical		◆			◆	●	◆	●	◆	●			●	◆	●	◆			◆
Metal Film	◆	●	●	◆		◆	●	◆	●	◆			●	◆	●	◆			◆
Metal Glaze						●	●	◆	●	◆			●	◆	●	◆			◆
Metal Oxide		●	●	◆		◆	●	◆	●	◆			●	◆	●	◆			◆
Precision	◆	●	●	◆		◆	●	◆	●	◆			●	◆	●	◆			◆
Thick Film Chip	◆	●	●	◆		◆	●	◆	●	◆			●	◆	●	◆			◆
Thin Film Chip	◆	●	●	◆		◆	●	◆	●	◆			●	◆	●	◆			◆
Trimmable					◆	◆	◆	◆	●	◆			◆	◆	◆	◆			◆
Voltage Divider			◆		◆	●	●	◆	●	◆			◆	▲	◆	◆	●	◆	
Terminations				◆															



NETWORK	Manufacturers														
	Bourns	KOA	Panasonic	Smiths Interconnect	TE Connectivity	TT Electronics	IRC	Welwyn	Vishay	Dale	Electro-Films	Techno	Thin Film	Vishay Precision Group	Yageo
Array	◆	●	◆	◆	◆	●	◆	●	◆	●	◆	●	◆	●	◆
Conformal Coated	◆	●	◆												
Custom	◆	●	◆		◆	●	◆	●	◆	●	◆	●	◆	●	◆
Integrated Passive	◆	●				◆	●	◆	●	◆	●	◆	●	◆	●
Ladder	◆	●				◆	●	◆	●	◆	●	◆	●	◆	●
Line Protection	◆						◆	●	◆	●	◆	●	◆	●	◆
Molded	◆	◆		◆	●	◆	●	◆	●	◆	●	◆	●	◆	●
Resistor / Capacitor	◆	◆	◆												
SMT	◆	●	◆		◆	●	◆	●	◆	●	◆	●	◆	●	◆
Surge	◆				◆	●	◆	●	◆	●	◆	●	◆	●	◆
Thick Film DIP	◆	●													
Thick Film SIP	◆	●													
Thin Film DIP	◆	●													
Thin Film SIP	◆	◆													
Fixed Attenuator				◆											
Temp Variable Btn				◆											

POTENTIOMETERS TRIMMERS	Manufacturers												
	BI Technologies (TT Electronics)	Bourns	Honeywell	Murata	OHMITE	Panasonic	TE Connectivity	Vishay	BComponents	Dale	Sfernice	Spectral	Vishay Precision Group
TRIMMING POTENTIOMETERS													
Adjustment Tools		◆		◆				◆					◆
Carbon	●	●		◆		◆	◆						◆
Cermet	●	●	●	◆		◆	◆	●	◆			◆	◆
Counters	●	◆						●	◆				◆
Multi-Turn	●	●		◆			◆	◆	◆	●		◆	◆
Open Frame	●	●		◆			◆	◆	◆	●		◆	◆
Sealed Frame	●	●		◆			◆	◆	◆	●		◆	◆
Single-Turn	●	●		◆			◆	◆	◆	●		◆	◆
Wirewound	●	▲			●		◆	◆	◆	●		◆	◆
PRECISION PANEL CONTROL													
Carbon		◆								◆			
Cermet	◆	◆	◆						◆	◆		◆	◆
Conductive Plastic	◆	◆	◆									◆	◆
Dials / Knobs	●	◆							◆	◆		◆	◆
Knobs	◆	◆		◆					◆	◆		◆	◆
Hybrid	◆	◆											
Linear	◆	◆		●					◆	◆		◆	◆
Metal Foil									◆	◆			◆
Modular	◆								◆	◆		◆	◆
Motor Pot	◆								◆	◆		◆	◆
Multi-Turn	◆	◆		◆					◆	◆		◆	◆
Non-Linear	◆								◆	◆		◆	◆
Open Frame Slide		◆											
Rheostat									◆	◆		◆	◆
Rotary	◆	◆	◆		◆				◆	◆		◆	◆
Sealed Frame	◆	◆		●					◆	◆		◆	◆
Single-Turn	◆	◆		◆					◆	◆		◆	◆
Wirewound	◆	◆	◆	◆					◆	◆		◆	◆
SENSOR/ENCODER													
Attenuator									◆	◆	●		
Encoders	◆	◆	●					◆	◆	◆			
Linear Motion		◆							◆	◆		◆	◆
Rotary	◆	●	◆		◆				◆	◆		◆	◆

POWER WIREWOUND CARBON & FOIL	Manufacturers														
	Bourns	KOA	OHMITE	Panasonic	TE Connectivity	TT Electronics	IRC	Welwyn	Vishay	Dale	Huntington / Milwaukee	Sfernice	Thin Film	Vishay Precision Group	Yageo
POWER/WIREWOUND															
Brackets / Hardware			●	◆					●	◆	◆				◆
Ceramic Composition			●	◆					●	◆	◆				◆
Commercial		●	◆		●	◆	●	◆	●	◆	◆				◆
Current Sense / Low Resistance	◆	●	●	◆	◆	●	◆	●	◆	●	◆	●	◆	●	◆
Grid			◆												
Industrial		◆	●		◆	●	◆	●	◆	●	◆	●	◆	●	◆
Precision		●	●		◆	●	◆	●	◆	●	◆	●	◆	●	◆
Rheostat			◆		◆	●	◆	●	◆	●	◆	●	◆	●	◆
Special Purpose		◆	●					◆	◆	◆	◆				◆
Tubular		◆	●		◆	●	◆	●	◆	●	◆	●	◆	●	◆
Vitreous Enamel			●					◆	◆	◆	◆				◆
CARBON															
Carbon Composition		●	●		◆	◆	◆								
Carbon Film		●	●		◆	◆	◆		◆	◆					◆
FOIL															
Bulk Metal Foil															●

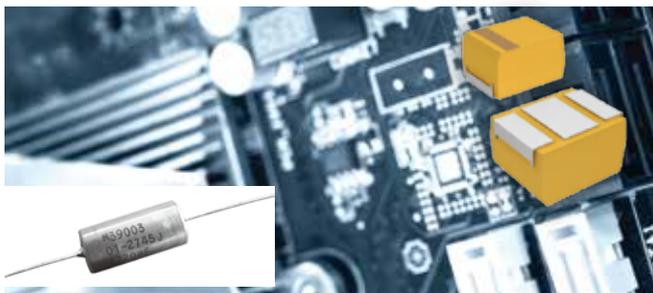
● Lead & Lead-free compliant parts available ◆ Lead-free only parts available ▲ Lead-only compliant parts available

Capacitors

ALUMINUM	AVX	Cornell Dubilier/ Illinois Capacitor	EPCOS (TDK)	KEMET	Murata	Nichicon	Panasonic	PowerStor (Eaton)	Surge / Leion	UCC	Vishay - BC Components
AC Motor Start	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Axial Electrolytic	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
EDLC / Supercapacitor	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
FlatPack Electrolytic	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Polymer	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Radial Miniature	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Screw Terminal	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Snap-In	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Surface Mount	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆



CERAMIC	AVX	Cornell Dubilier	KEMET	Murata	Spectrum Control (API Technologies)	Syfer	TDK - EPCOS	Vishay	BCcomponents	Ceramate	Vitramon	United Chemi-Con	Yageo
Arrays	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Dip 2-Pin	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Disc	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
High Cap	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
High Q	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
High Temperature	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
High Voltage	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Low Inductance	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Multi-Layer	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
RF / Microwave	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Safety	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Single Layer	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Switch Mode	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Tip and Ring	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Trimmer	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆



FILM & MICA	AVX	Cornell Dubilier	KEMET	Nichicon	Panasonic	Spectrum Control (API Technologies)	Surge / Leion	TDK - EPCOS	United Chemi-Con	Vishay	BCcomponents	Draloric	Roadster	WIMA
FILM														
Motor Run	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Polyester	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Polypropylene	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Power Film	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Snubber	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Suppression X-Y (Safety Cap)	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Surface Mount	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
MICA														
Metal Clad	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Mica	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Surface Mount	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆



TANTALUM	AVX	KEMET	Panasonic	Vishay
Conformal Coated Chip	◆	◆	◆	◆
Dipped Radial	◆	◆	◆	◆
Fail Safe / Fused Chip	◆	◆	◆	◆
Hermetic Through Hole	◆	◆	◆	◆
High Temperature Chip	◆	◆	◆	◆
Low ESR Chip	◆	◆	◆	◆
Low Profile Chip	◆	◆	◆	◆
Micro-Chip	◆	◆	◆	◆
Molded Chip	◆	◆	◆	◆
Molded Through Hole	◆	◆	◆	◆
Niobium Chip	◆	◆	◆	◆
Polymer Chip	◆	◆	◆	◆
Solid Metal Case Through Hole	◆	◆	◆	◆
Supertan	◆	◆	◆	◆
Wet Through Hole	◆	◆	◆	◆

◆ Lead & Lead-free compliant parts available ◆ Lead-free only parts available ▲ Lead-only compliant parts available

Circuit Protection & Electromagnetic Components

PROTECTION DEVICES	AVX	Bourns	Bussmann (Eaton)	EPCOS (TDK)	KOA	KEMET/NEC TOKIN	Littelfuse - Tecor	Murata	Panasonic	TE Connectivity's Raychem	ROHM Semiconductors	TDK	United Chemi-Con	Vishay	BC Components	Dale	Semiconductors
	OVER CURRENT																
Automotive (Blade) Fuses		◆				◆											
Axial Fuses		◆				◆											
Cartridge Fuses			●			◆											
NTC Thermistors	●		◆	◆		◆					◆		●	◆	◆	●	
Power (Electrical) Fuses			●			◆											
PTC Thermistors		◆	◆	◆		◆	◆				◆		●	◆	◆	●	
Radial Leaded Resettable Fuses (PTC)		◆	◆			◆			◆								
Radial Subminiature Fuses			◆			◆											
Surface Mount Resettable Fuses (PTC)		◆	◆		◆	◆				◆							
Surface Mount (125V+) Fuses		◆	●		◆	◆			◆								
Thermal Cutoffs (TCO)				◆													
Thin Film (Chip) Fuses	●	◆	◆			◆	◆	◆	◆					◆	◆		
OVER VOLTAGE																	
Gas Discharge Tube (GDT)	●	◆				◆			◆	◆							
Line Protection Networks		◆															
Polymer ESD Suppression				◆					◆								
Protection Thyristors		◆				◆											
Surface Mount Varistors (MLV)	◆	◆	◆	◆	◆	◆		◆			◆	◆	◆	◆	◆		
Thermal MOV			◆			◆					◆	◆					
Through-Hole Varistors (MOV)		◆	◆	◆	◆	◆		◆			◆	◆	◆	◆	◆		
TVS Diodes	◆	◆	◆			◆		◆		◆		◆	◆	◆	◆		◆
TVS Diodes Arrays	◆			◆	◆	◆		◆		◆		◆	◆	◆	◆		◆

Filters

EMI/RFI & RF	AVX	KEMET / NEC TOKIN	Murata	Panasonic	Pulse	Smiths Interconnect	Spectrum Control (API Technologies)	Syfer	TDK - EPCOS	TE Connectivity's Corcom	Yageo
	EMI / RFI Filters	●	●	●	●	◆	◆	●	●	●	◆
Feed-Thru Filters	●	●	●				●	●	●	◆	
Noise Suppression Sheets			◆						◆	◆	
RF / Microwave Filters	●		●	●	●	◆	●	●	●	◆	●
RF Module			●	●					●	◆	
SAW Filters		◆	◆	◆			●	●	◆	◆	
Surface Mount Filters	●	●	●	●	◆	◆	●	●	●	◆	●



Magnetics

FERRITES INDUCTORS TRANSFORMERS	API Delevan	AVX	BI Technologies (TT Electronics)	Bourns - JW Miller	Coiltronics (Eaton)	KEMET / NEC TOKIN	KOA	Littelfuse - Tecor	Murata	Panasonic	Pulse	Spectrum Control (API Technologies)	TDK - EPCOS	Vishay - Dale	Yageo
	Air Coil Inductors	●	◆								◆		●	◆	◆
Common Mode Chokes	●	◆	◆	◆	◆				◆	◆		●	◆	◆	◆
Custom Inductors	●			●					◆			◆	◆	◆	◆
Ferrite Beads	◆		◆			◆	◆		◆	◆		◆	◆	◆	◆
Ferrite Cores/Clamp Filters	◆			◆					◆			◆	◆	◆	◆
High Current Inductors	●	◆	●	◆	◆	◆			◆	◆		●	◆	◆	◆
Leaded Inductors				◆	◆							●	◆	◆	◆
Military Inductors	●											●	◆	◆	◆
Multilayer Inductors			◆	◆		◆	◆		◆			●	◆	◆	◆
Power Inductors	●	◆	●	◆	◆	◆			◆	◆		●	◆	◆	◆
RF Inductors	●	◆	◆	◆	◆	◆			◆	◆		●	◆	◆	◆
Thin Film Inductors		◆	◆						◆			◆	◆	◆	◆
Torroid Inductors	◆		◆	◆	◆				◆			●	◆	◆	◆
Transformers	●	◆	◆	◆	◆	◆		◆	◆	◆		●	◆	◆	◆
Wirewound/Coil Inductors	●	◆	◆	◆	◆	◆			◆	◆		●	◆	◆	◆

Piezo

SOUND DEVICES	AVX	Murata	Panasonic	TDK
	Buzzer	●	●	●
Microphone				
Receiver				
Ringer	●	●	●	
Sensor		●	●	●
Sounder		●	●	●
Speaker		●	●	

Timing Devices

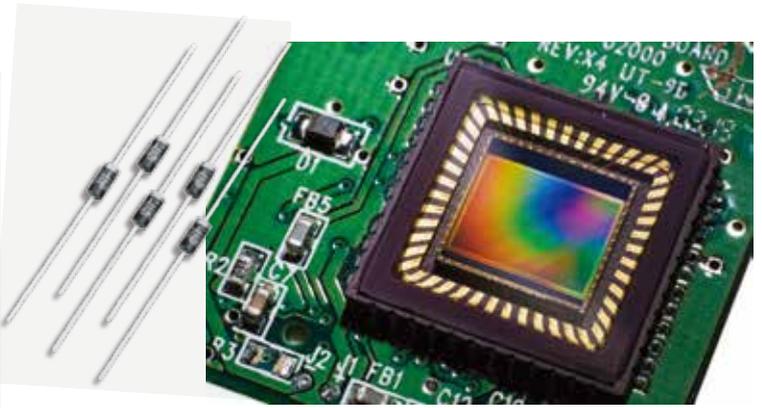
FREQUENCY CONTROL	API Technologies	Kyocera	Murata	Panasonic	TDK	Vishay - Dale
	Crystals	●	●	●	●	●
Oscillators	●	●	●	●	●	●
Piezo Sound Devices		●	●	●	●	
Resonators		●	●	●	●	
Tuning Forks	●					●



● Lead & Lead-free compliant parts available ◆ Lead-free only parts available

Discretes

POWER SEMICONDUCTORS	AVX	Bourns	Littelfuse - Teccor	Panasonic	ROHM Semiconductor	Semelab (TT Electronics)	Vishey
DIODES							
Arrays		◆	◆	◆	◆	◆	◆
Schottky	◆			◆	◆	◆	◆
Small Signal		◆		◆	◆	◆	◆
TVS	◆		◆	◆	◆	◆	◆
Zener		◆	◆	◆	◆	◆	◆
RECTIFIERS							
Bridge			◆	◆	◆	◆	◆
Rectifiers		◆	◆	◆	◆	◆	◆
Schottky			◆	◆	◆	◆	◆
SCRs		◆					◆
THYRISTORS							
Protection			◆				
Switching (SCRs, Triacs)			◆				◆
TRANSISTORS							
Bipolar		◆	◆	◆	◆		
Small Signal		◆	◆	◆	◆		
IGBTs							
Discrete				◆	◆		◆
Modules			◆	◆	◆		◆
MOSFETS							
High-voltage				◆	◆		
Low-voltage			◆	◆	◆		
Modules				◆	◆		◆



OPTOELECTRONICS	Littelfuse	Murata (MPS)	OPTTEK (TT Electronics)	Panasonic	ROHM Semiconductor	Vishey
Digital Panel Meters		◆				
High Voltage Isolators			◆		◆	
Infrared Components			◆		◆	◆
LEDs - Indication				◆	◆	◆
LEDs Illumination <1W			◆	◆	◆	◆
LEDs - Illumination >1W			◆	◆	◆	◆
LED Displays					◆	◆
LED Drivers				◆	◆	◆
LED Modules				◆	◆	
Optical Sensing	◆		◆		◆	◆
Opto Solutions			◆			
Optocouplers						◆
Solid State Relays				◆	◆	



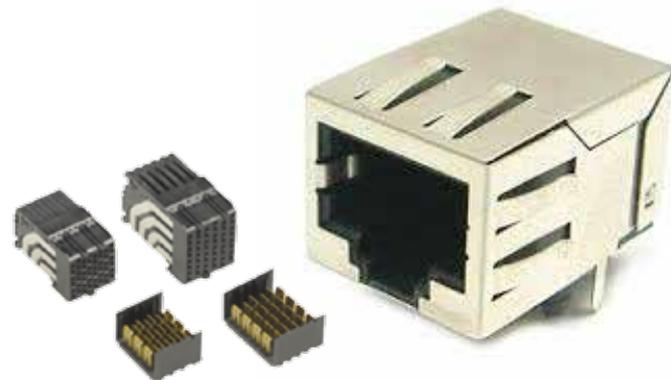
ADDITIONAL DISCRETE COMPONENTS	ROHM Semiconductor	Semelab (TT Electronics)	Vishey
Analog	◆	◆	◆
LED Drivers	◆		◆
Motor Control Drivers	◆		◆
RF Diodes	◆	◆	◆
RF Transistors	◆	◆	
Voltage Regulators	◆	▲	◆

▲ MIL Spec Discretes (DSSC)

● Lead & Lead-free compliant parts available ◆ Lead-free only parts available ▲ Lead-only compliant parts available

Interconnect

RF/COAXIAL/MICROWAVE	3M	AirBorn	Amphenol Aero	Amphenol Connex	Amphenol RF	Amphenol SV Microwave	Molex	Smiths Interconnect	TE Connectivity
1.0 / 2.3					◆	◆		◆	
1.6 / 5.6					◆	◆		◆	
7 / 16				◆	◆	◆		◆	
BMA						◆		◆	
BNC (50/75Ω)				◆	◆	◆		◆	
BNC (Miniature)					◆	◆		◆	
B to B Blindmate/Compression					◆	◆		◆	
BSA				◆	◆	◆		◆	
Coax Terminations							◆		
Coax Attenuators							◆		
FAKRA					◆			◆	
MCX / MMCX				◆	◆			◆	
MHV / SHV					◆			◆	
Microwave Cable Assemblies					◆	◆		◆	
Precision ¹					◆			◆	
QMA					◆			◆	
Reverse Polarity ²				◆	◆			◆	
RF Cable Assemblies					◆	◆		◆	
Shielded Terminators				◆				◆	
SMA				◆	◆	◆		◆	
SMB (50/75Ω)				◆	◆	◆		◆	
SMB (Miniature)				◆	◆	◆		◆	
SMC				◆	◆	◆		◆	
SMP					◆			◆	
SMT					◆			◆	
SSMA					◆			◆	
TNC				◆	◆	◆		◆	
Triax				◆	◆	◆		◆	
Twinax	◆	◆		◆	◆	◆		◆	
Type F/G				◆	◆	◆		◆	
Type N				◆	◆	◆		◆	
UHF / MiniUHF				◆	◆	◆		◆	



- Lead & Lead-free compliant parts available
- ◆ Lead-free only parts available

BACKPLANE, BOARD-TO-BOARD & DEVICE-TO-BOARD	3M	AirBorn	Amphenol Commercial	Amphenol PCD	Amphenol TCS	AVX - Elco	Bourns	FCI	Harwin	Molex	Omron	Panasonic	Smiths Interconnect	TE Connectivity
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BACKPLANE	3M	AirBorn	Amphenol Commercial	Amphenol PCD	Amphenol TCS	AVX - Elco	Bourns	FCI	Harwin	Molex	Omron	Panasonic	Smiths Interconnect	TE Connectivity
10 Gb/s+ Solutions		◆	◆						◆		◆			◆
2.00 mm (.079 inch)		◆				◆			◆		◆			◆
AOC Assemblies		◆		◆					◆		◆			◆
Assemblies (Backplane)		◆							◆		◆			◆
ATCA/MicroTCA		◆				◆			◆		◆			◆
Cable Assemblies		◆				◆			◆		◆			◆
Card Edge		◆	◆						◆		◆			◆
Compact PCI		◆	◆			◆			◆		◆		◆	◆
DIN 41612 (Eurocard)		◆				◆			◆		◆			◆
Fiber Optic		◆		◆					◆		◆			◆
Future Bus		◆							◆		◆			◆
Hard Metric		◆				◆			◆		◆			◆
High Speed Cable Assemblies		◆	◆						◆		◆			◆
PCI Express		◆	◆						◆		◆			◆
Power		◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
RF / Ganged RF			◆						◆		◆			◆
SCA-2				◆					◆		◆			◆

BOARD TO BOARD	3M	AirBorn	Amphenol Commercial	Amphenol PCD	Amphenol TCS	AVX - Elco	Bourns	FCI	Harwin	Molex	Omron	Panasonic	Smiths Interconnect	TE Connectivity
Ball Grid Array (BGA)		◆			●				◆		◆			◆
Battery Connectors									◆		◆		◆	◆
Board Stacking		◆	●		●				◆		◆			◆
Breakaway Headers		◆	◆						◆		◆			◆
Compression		◆	◆						◆		◆			◆
Headers & Receptacles		◆	◆	◆					◆		◆			◆
Mezzanine/FPC		◆			●	◆	◆	◆	◆	◆	◆	◆	◆	◆
Power		◆	◆	◆	◆	●	◆	◆	◆	◆	◆	◆	◆	◆
Rotary Backlock											◆			◆
SCSI		◆	◆						◆		◆			◆
Shunts		◆	◆						◆		◆			◆
Stacking		◆	◆		●	◆	◆	◆	◆	◆	◆	◆	◆	◆

DEVICE TO BOARD	3M	AirBorn	Amphenol Commercial	Amphenol PCD	Amphenol TCS	AVX - Elco	Bourns	FCI	Harwin	Molex	Omron	Panasonic	Smiths Interconnect	TE Connectivity
AOC Assemblies		◆		◆					◆		◆			◆
DIMM						◆			◆		◆			◆
DIP		◆							◆		◆			◆
High Speed Cable Assemblies		◆	◆	◆					◆		◆			◆
PCMCIA		◆							◆		◆			◆
PGA		◆							◆		◆			◆
PLCC		◆							◆		◆			◆
Rambus									◆		◆			◆
RIMM / DIMM / SIMM									◆		◆			◆
Rotary Backlock											◆			◆
SIP		◆							◆		◆			◆
Slot 1 & 2									◆		◆			◆
SO DIMM & RIMM						◆			◆		◆			◆
Test / Burn-In Sockets		◆							◆		◆			◆
Transistor									◆		◆			◆

TERMINAL BLOCKS	Amphenol PCD	FCI	Molex - Beau	Phoenix Contact	Smiths Interconnect	Souriau	Spectrum Control (API Technologies)	TE Connectivity
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Barrier Strips			◆				◆	◆
Europa								◆
Eurostyle - Fixed / Pluggable		◆	◆	◆	◆		◆	◆
2.54/3.50/3.81/5.0/5.08 mm		◆	◆	◆	◆		◆	◆
Filtered					◆		◆	
Interface Modules		◆			◆			◆
NEMA								◆
Phenolic			◆					◆
Push Button			◆					◆
Rail Mounted		◆		◆		◆		◆
Screw Terminal		◆	◆	◆	◆	◆	◆	◆
Spring Clamp		◆	◆	◆	◆	◆	◆	◆

Interconnect

MEMORY CARD CONNECTORS

	3M	Amphenol	AVX - Elco	C&K	FCI	Molex	TE Connectivity
CompactFlash™	◆	◆	◆		◆	◆	◆
DDR/DDR2/Mini DDR2			◆		◆	◆	◆
Express Card					◆	◆	◆
Full Size Card				◆			
Memory Stick / Duo					◆	◆	◆
Micro SD			◆		◆	◆	◆
Mini SD			◆		◆	◆	◆
MMC		◆			◆	◆	◆
PC Card / CardBus	◆	◆			◆	◆	◆
PCMCIA	◆				◆	◆	◆
SD (Secure Digital)	◆		◆		◆	◆	◆
Smart Card (SAM)				◆			
Smart Card (SIM)		◆	◆		◆	◆	◆
TransF		◆					
xD	◆						◆

CompactFlash™ is a trademark of the Compact Flash Association

WIRE-TO-BOARD WIRE-TO-WIRE

	3M	AirBorn	Amphenol	AVX - Elco	FCI	Harwin	Molex	Phoenix Contact	Smiths Interconnect	Souriau (Esseries Connection Tech)	TE Connectivity
1.00 mm (.039 inch)	◆			◆	◆	◆	◆				◆
1.25 mm (.049 inch)				◆	◆	◆	◆				◆
1.27 mm (.050 inch)	◆			◆	◆	◆	◆				◆
2.00 mm (.079 inch)	◆			◆	◆	◆	◆	◆			◆
2.50 mm (.098 inch)				◆	◆	◆	◆				◆
2.54 mm (.100 inch)	◆	◆		◆	◆	◆	◆	◆			◆
3.00 mm (.118 inch)	◆			◆		◆					◆
3.68 mm (.145 inch)						◆					◆
3.96 mm (.156 inch)						◆					◆
4.00 mm (.157 inch)				◆							◆
4.20 mm (.165 inch)						◆					◆
5.00 mm (.197 inch)						◆	◆				◆
5.03 mm (.198 inch)						◆					◆
5.08 mm (.200 inch)						◆	◆				◆
6.35 mm (.250 inch)						◆	◆				◆
7.50 mm (.295 inch)						◆	◆				◆
9.00 mm (.354 inch)				◆							◆
10.00 mm (.393 inch)						◆					◆
Bus Bar						◆	◆				◆
Cable Assemblies	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Discrete Wire	◆			◆	◆	◆	◆	◆	◆	◆	◆
FFC / FPC				◆	◆	◆	◆				◆
IDC Discrete Wire	◆			◆	◆	◆	◆				◆
IDC / Mass Termination	◆	◆	◆	◆	◆	◆	◆				◆
Mini D Ribbon / Champ				◆	◆	◆	◆				◆
Power	◆	◆	◆	◆	◆	◆	◆				◆
SATA / SAS / Mini SATA	◆		◆	◆	◆	◆	◆				◆
SCSI I, II, III	◆		◆	◆	◆	◆	◆				◆

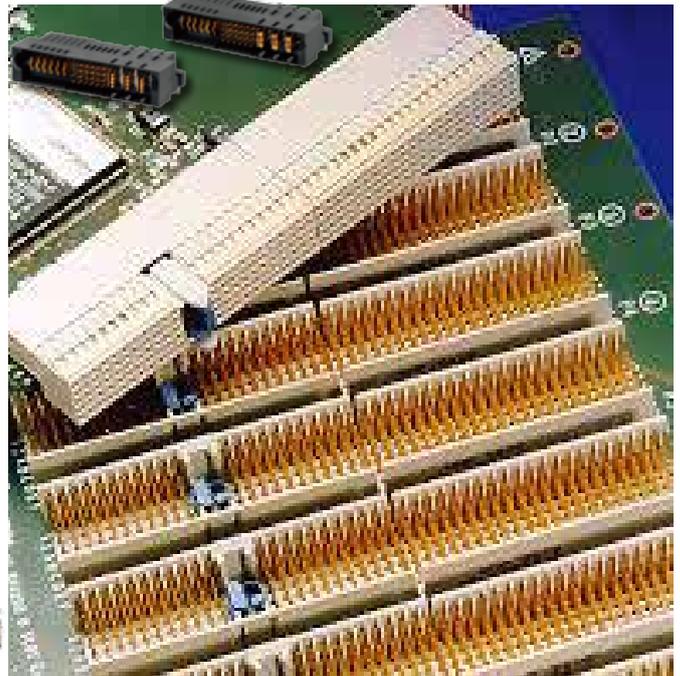


◆ Lead-free only parts available

INPUT/OUTPUT

	3M	AirBorn	Amphenol	Amphenol Commercial	Amphenol PCD	AVX - Elco	FCI	Harwin	Molex	Omron	Panasonic	Phoenix Contact	Smiths Interconnect	Souriau	Spectrum Control (API Technologies)	TE Connectivity
1394 & 1394b	◆		◆	◆				◆						◆		◆
Audio			◆	◆	◆											◆
Camera Link / Mini Camera Link	◆															◆
Circular	◆	◆	◆	◆			◆	◆	◆			◆	◆	◆	◆	◆
Combo I/O	◆						◆	◆	◆							◆
Display Port			◆	◆				◆	◆							◆
D-Subminiature	◆		◆	◆			◆	◆	◆			◆	◆	◆	◆	◆
DVI			◆				◆	◆	◆	◆						◆
Fiber Channel			◆	◆				◆	◆							◆
Fiber Optic	◆		◆				◆	◆	◆			◆	◆	◆	◆	◆
Filtered I/O	◆		◆				◆	◆	◆				◆	◆	◆	◆
HDMI / Micro HDMI			◆	◆			◆	◆								◆
IPass				◆				◆								◆
InfiniBand®			◆	◆			◆	◆								◆
M12 / M12D / M8										◆			◆			◆
Micro D			◆	◆				◆					◆			◆
Mini DIN / Circular DIN				◆												◆
Mini D-Subminiature														◆		◆
Mobile Systems								◆								◆
Modular Plugs & Jacks	◆		◆	◆			◆	◆								◆
PCI Express				◆			◆	◆								◆
Power			◆	◆	◆	◆	◆	◆				◆	◆	◆	◆	◆
Push / Pull								◆					◆	◆	◆	◆
Rectangular	◆	◆	◆	◆	◆	◆	◆	◆	◆			◆	◆	◆	◆	◆
RF / Coax / Microwave	◆		◆					◆			◆	◆	◆	◆	◆	◆
RJ / Industrial Ethernet			◆	◆	◆	◆	◆	◆		◆		◆	◆	◆	◆	◆
SATA / SAS / Mini SATA	◆		◆	◆	◆	◆	◆	◆								◆
SCSI	◆		◆	◆	◆	◆	◆	◆								◆
SFP / XFP				◆			◆	◆								◆
TDP								◆								◆
USB / Mini USB / USB OTG			◆	◆	◆	◆	◆	◆				◆	◆	◆	◆	◆

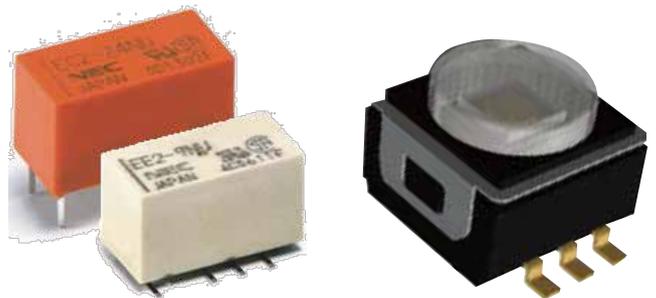
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Electromechanical

SENSORS													
	AVX	Bourns	Honeywell	KOA	Littelfuse, Hamlin	Murata	Omron Automation & Safety	Omron Components	Panasonic	ROHM Semiconductor	TDK / EPCOS	TT Electronics	Vishay
● On-board													
○ Off-board													
◆ Both On and Off-board													
MOTION/POSITION/SPEED													
Accelerometer			○		●	●	●	●	●				
Encoder/Rotary		○	◆		○	◆		●	●			●	
Inclinometer/Tilt						◆		●					●
Inertial Measurement Unit			○			●							
Liquid Level			○		○					●			
Motion (Human Presense)						●		◆	◆				
Position, Displacement		○	○					●					○
Proximity		○	○		○	●	○	○		◆		○	○
Shock & Vibration			○			●		◆	◆				
Speed (Hall-Effect)		◆	◆		○	●			◆	◆	○	◆	
Ultrasonic			○			◆	○						
OPTICAL													
Ambient Light						●		●	●				●
Fiber Optic			○				○						
Infrared			◆			●		●				●	●
Photodiodes			●									●	●
Photoelectric			◆									◆	◆
PRESSURE/FORCE/FLOW													
Barometer						●							
Flow			◆				◆	◆				○	
Force			●										
Load Cell/Load Pin			○										
Pressure			◆		◆	●		●	◆		●	◆	
THERMAL/HUMIDITY													
Air/Gas/Fluid Property			◆								●		
Combination MEMS/SMD			●				●						
Heaters			◆										
Humidity			●								●		
NTC Thermistor	●		◆	●	●	●		●		◆		◆	
Probes & Assemblies			○							○	○	○	
PTC Thermistor				●	●			◆		●	◆	◆	
RTD			◆			◆						●	
Thermocouples						○					○		
Thermophile							●						
OTHER													
Auto/Vehicle		●	◆		●						●	●	
Capacitive Touch						●							
Current			◆			●					○		

RELAYS, CIRCUIT BREAKERS & SWITCHES										
	Bourns	C&K Components	Hamlin (Littelfuse)	Honeywell	KEMET / NEC TOKIN	Littelfuse - Teccor	Omron	Panasonic	Phoenix Contac	TE Connectivity
RELAYS										
Communication							◆	◆		◆
DIN Rail Mounted							◆	◆	◆	◆
Dry Reed			◆							◆
General Purpose						◆	◆	◆	◆	◆
High Voltage Switching						◆	◆	◆	◆	◆
Low Signal PCB					◆		◆	◆		◆
Military										◆
Miniature PCB							◆	◆		◆
MOSFET							◆	◆		◆
Power							◆	◆		◆
Power Controllers										◆
Power Distribution Panels										◆
Power PCB							◆	◆		◆
Programmable Time Delay										◆
Protective							◆	◆		◆
Reed			◆			◆				◆
Reverse Power										◆
Rotary										◆
Signal							◆	◆	◆	◆
Sockets							◆	◆		◆
Solid State							◆	◆	◆	◆
Time Delay										◆
Timers							◆	◆		◆
SWITCHES										
Contact Block							◆	◆		◆
Detector		◆	◆					◆	◆	◆
DIP		◆	◆					◆	◆	◆
Encoder				◆				◆		◆
Fader										◆
Hour Meter					◆					◆
Industrial		◆	◆				◆	◆		◆
Keylock		◆	◆					◆		◆
Keypad		◆	◆					◆		◆
Knobs								◆		◆
Limit		◆	◆					◆		◆
Navigation		◆	◆			◆				◆
Optical			◆					◆	◆	◆
Paddle		◆	◆			◆				◆
Panel Mount		◆	◆					◆		◆
Power Rocker		◆	◆					◆		◆
Pressure Switch				◆						◆
Pushbutton		◆	◆			◆	◆	◆	◆	◆
Pushwheel		◆				◆				◆
Reed			◆							◆
Rocker		◆	◆				◆	◆		◆
Rotary	◆	◆	◆				◆	◆	◆	◆
Safety		◆	◆							◆
Selector		◆	◆					◆		◆
Slide		◆	◆						◆	◆
Snap Action		◆	◆					◆	◆	◆
Special Purpose			◆					◆	◆	◆
Switchlock		◆	◆							◆
Surface Mount	◆	◆						◆	◆	◆
Tactile	◆	◆						◆	◆	◆
Thumbwheel							◆	◆		◆
Toggle		◆	◆					◆		◆
Vacuum			◆							◆



◆ Lead-free only parts available

For more information contact:
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Optical Networking



Smart Meter



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