IP&E News

1st Quarter 2025

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Content

BOURNS®

Riedon™ Power Resistors by Bourns

These technologies offer high power ratings, low temperature coefficients (TCR), and wide resistance and temperature ranges.

Applications:

- Industrial power supplies, inverters and motor drives
- Smart meters
- Solar inverters
- Telecom 5G remote radio and baseband units
- Capacitor recharge/ discharge circuits
- Current sensing

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Bourns is pleased to announce the introduction of Riedon™ Power Resistors by Bourns.

The Model HPP, MS, MSR, MT, SF-2, SSL, UAL, UB, UT, UV and UW Series are included in this release. With multiple technologies available, these power resistors span multiple application sectors by providing reliable, rugged, and precise resistors. Included in the product introduction are wirewound resistors in through-hole and surface mount packages along with surface mount metal film and bare/coated metal element resistors.

These technologies offer high power ratings, low temperature coefficients (TCR), and wide resistance and temperature ranges. Applications such as battery energy storage systems, industrial power supplies, motor drives, smart meters, and current sensing will benefit from the breadth offered in the Riedon™ Power Resistors by Bourns product series.

Features

- Ceramic, silicone coated, surface mount, and aluminum housed wirewound resistors available; surface mount metal film and bare/coated metal element resistors also included
- High power and precision current sensing capabilities
- Available resistance tolerances from ±0.01 % to ±10 %
- Numerous package styles
- Wide range of resistance values from 0.003 Ω to 3 MΩ with TCRs as low as ±5 PPM/°C
- Power ratings of up to 50 W and temperature ranges of -55 to +350 °C
- Designed to MIL-R-26 / MIL-R-39007 power ratings (select series)
- RoHS compliant*
- Excellent pulse capability
- Customized product available

Orderable Series at arrow.com
HPP, MS, MSR, MT, SF-2, SSL, UAL, UB, UT, UV, and UW

*RoHS Directive 2015/863, Mar 31, 2015 and Annex. "Bourns" is a registered trademark of Bourns, Inc. in the United States and other countries. In April 2023, BE Services Company, Inc., a subsidiary of Bourns, Inc., purchased certain assets of Riedon, Inc., including its logo and trademarks and the right to continue to manufacture former Riedon™ products. The Riedon logo is a registered trademark of BE Services Company, Inc. in the United States. "Riedon" is a trademark of BE Services Company, Inc.

Smart Cable Management

HellermannTyton

Specialized fasteners that use holes, screws, weld studs, or panel edges make cable installation easier and quicker.

Securing cables, wires, hoses, or conduits can be tricky, especially in tight spaces. Specialized fasteners that use holes, screws, weld studs, or panel edges make installation quicker and easier.

EdgeClips offer a flexible solution by using the edge of a component for secure cable routing in vehicles, machinery, and appliances. They fit common edge thicknesses from 0.5 – 2.5 mm up to 6.0 – 8.0 mm. Easy to push on by hand, they resist high pull-off forces and allow cables to be routed in various directions thanks to multiple geometric designs.

Fir trees, designed for round or oval holes, require minimal insertion force while providing strong hold. Discs reduce rattling, while oval designs prevent rotation. Standoffs create vertical space between the mounting point and cables, and offsets increase horizontal clearance.

Arrowheads work best with precise panel thicknesses and click audibly when fully engaged. Stabilizing wings enhance grip, while foam gaskets block moisture and debris.

For heavy-duty tasks, stud mounts are the top choice. They endure higher pull-off forces than fir trees or arrowheads and prevent cable wear by covering bolts or studs.

Whatever your cable routing needs, HellermannTyton has a dependable solution ready for the job.

Scan QR-Code to find more information on arrow.com

Orderable Part Numbers at arrow.com

- 126-03100
- 157-00145
- 157-00158
- 157-00197
- 157-00119
- 157-00120
- 151-00429
- 150-40591
- 156-01546
- 150-76079
- 156-01543
- 156-05904
- 156-01545
- 150-92600
- 156-01542
- 156-00015
- 156-01797

NOW CHARGING ... with KEMET Sensor & Magnetic

KEMET offers smart solutions for EV charging, through cable or wireless ... and more

Scan QR-Code to find more information on arrow.com

KEMET expands the FG-R series residual current sensor (RCD) portfolio for EV charging.

To meet increasing requirements and a wider application range KEMET expands the lineup of residual current sensors. Different AC tripping levels in combination with the 6mA DC threshold become available and a full UL2231 version. In general, the IEC conform sensors are also acting like a Type B RCD according to IEC62423 while IEC62752 and IEC62955 are still satisfied standards. (Certificates of TüV and UL on request)

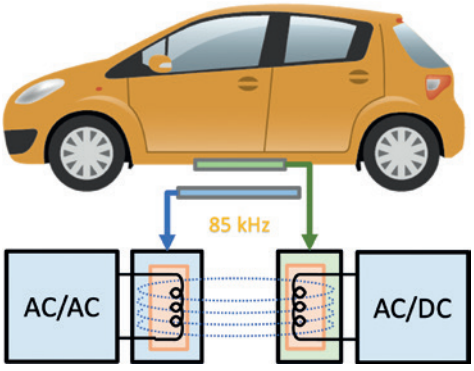
In addition, the application ambient extended to automotive "under the hood" use and therefore a compliance with ASIL B can be achieved and general automotive demands like IMDS, PPAP and other documentation is available on request. For bidirectional on-board chargers (OBC) at discharging a residual current monitoring is mandatory. Finally, a new form factor becomes available that is easy to implement on the primary side by busbar designs that support a natural current flow on the PCB.

Orderable Part Numbers at arrow.com

	Mode 2, Mode 3 & UL UL2231, IEC62752, IEC62955 • 6 mA DC • 20 mA AC	**Mode 2 & Mode 3** IEC62752, IEC62955 • 6 mA DC • 30 mA AC	**UL2231** CCID 20 & CCID 5 • 5 mA AC • 20 mA AC
	FG-R05-4A	FG-R05-4BA	FG-R05-4GA
	FG-R04-4AA	FG-R04-4BA	FG-R04-4GA
	FG-R01-4A	FG-R01-4B	FG-R01-4GA
	FG-R02-4A	FG-R02-4B	FG-R02-4GA

KEMET helps also for the efficiency of Wireless Power Transfer (WPT) with FPL ferrite tiles.

The concept of wireless power transfer has long been known since the invention of the Tesla coil. However, due to low power conversion efficiency, this technology could not be commercialized for a long period of time. With the development of new materials and more efficient electronic converters, it is now possible to transfer energy wirelessly with decent efficiency.



The availability of KEMET FPL ferrite tiles in customized shapes and sizes is a massive benefit for automotive WPT system designers. With customized dimensions, designers can focus on engineering aspects without worrying about space/dimensional constraints.

Currently, the primary market of WPT ferrite tiles is automotive companies. However, this does not limit the applications of these tiles in other areas, such as in robotics, forklifts, agricultural machines, medical equipment, military drones, and industrial machinery. With their excellent charging characteristics, ferrite tiles will be an integral part of the WPT systems of the future.

Orderable Part Numbers at arrow.com

- FPL100
- FPL150
- FPL240

KYOCERA AVX – Polymer Capacitor Portfolio

Standard Polymer, Automotive Polymer and High Reliability Polymer Capacitors

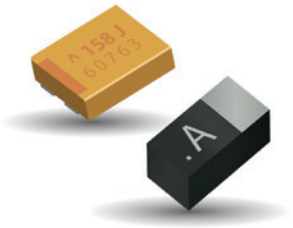
KYOCERA AVX offers a broad range of conductive polymer solid electrolytic capacitors, targeting general and specific market requirements. Typical features like high capacitance in small and low profile, low ESR, stability of performance in time, benign failure mode under recommended use conditions, make them a good choice in applications like smartphones, tablets, PCs, telecommunication, SSD and also industrial, automotive, defense and aerospace.

We are the first to market with several new polymer technologies such as the highest voltage in the industry, over 100 Vr (Elektra award 2010), smallest case size 0402, 0603, 0805, highest reliability polymer in hermetically sealed package (Elektra award 2015) and highest energy density Joules / cc.

KYOCERA AVX polymers are available in a wide variety of technologies like low profile, high CV, high energy, low ESR in both J-lead and facedown (undertab) designs in product series targeting commercial, industrial, aerospace and automotive (AEC-Q200 Qualified) requirements.

KYOCERA AVX has an open and progressive policy on ethical supply and is first to be in compliance with OECD guidelines and legislation on conflict materials. Our polymer capacitors are environmentally friendly, lead-free, halogen free m.compound and RoHS compliant.

Standard Polymer Capacitors (TCJ/TCM Series)
Standard conductive polymer capacitors in broad range of industry standard SMD design case sizes with J-lead terminations. KYOCERA AVX offers polymers in the industry highest CV values and highest rated Voltages up to 125 V, matching the electronic industry's need for low ESR, benign failure mode, reliable type of solid electrolytic capacitors. TCJ series capacitors are designed for general and broad range of applications, TCM multianode design series offers the lowest ESR.



Automotive Polymer Capacitors (TCQ/TCO Series)
KYOCERA AVX offers polymer ranges meet AEC-Q200 specification in two products families. TCQ for standard temperature operation conditions and TCO for higher temperature demanded applications.

High Reliability Polymer Capacitors (TCB/TCD Series)
The new High-Rel Series polymer chip capacitors are designed for use in high reliability applications, high-rel parts are subjected to KYOCERA AVX's maverick part control with statistical screening and process control enhancement ensuring high performance in demanding environment.

Orderable Series at arrow.com
TCJ, TCM, TCQ, TCO, TCB, and TCD

Scan QR-Code to find more information on arrow.com

Broadest Fuse & Fuseholder Portfolio

Littelfuse is leader in high-current high voltage fuses & fuse holders targeted for datacenter & cloud and automotive

Littelfuse offers industry's first ultra-high amperage surface mount fuses for Datacenter and Cloud

In today's data center server market, with the rise of AI computing and data/ crypto mining functions, a huge amount of power has become a requirement, coupled with the need to optimize the density of the racks. With this increased power requirement at the same system voltages and at very space-constrained products, there is a need for ever smaller and even higher current-rated overcurrent protection and fuse solutions.

Littelfuse has industry's first ultra-high amperage surface mount fuses for high power applications in various markets including datacenters, network infrastructure, UPS, high-wattage power supplies and servers & racks. First generation **Nano2® 881 & 881F Series** have been the solution of choice for most customers for such applications, providing them with a single fuse solution for the requirement. These series offer a single fuse solution up to 75 VDC and are available in current ratings from 60 A to 125 A. However, with the heightened power requirement, even the 881 Series ratings are no longer sufficient, rendering them the need to do parallel fusing using the 881 series parts.

The newly launched **871 series** Ultra-High Amperage SMD Fuse supplements the 881 Series by offering 150 A and 200 A fuse ratings, a significant upgrade from the 881 Series' 125 A maximum rating. The 871 Fuse Series provides a single-fuse, surface-mounted solution for electronics designers, eliminating the need for parallel fusing configurations. The 871 Series High-Current SMD Fuse is the first and only small-sized SMD fuse with ultra-high ratings of 150 A and 200 A, previously only available in much larger through-hole fuses. This advancement addresses the challenges of higher power requirements and limited fuse amperage ratings, offering a streamlined solution for modern electronic designs.

Scan QR-Code to find more information on arrow.com

Littelfuse offers industry's first high voltage and high current AEC-Q200 qualified solutions for automotive applications

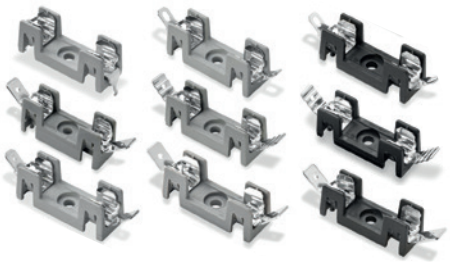
The AEC-Q200 standard, which provides stress test qualifications for passive electrical devices, has been expanded to include fuses for automotive applications. The standard ensures that AEC-Q200-qualified fuses meet high standards of ruggedness and reliability. Littelfuse has contributed to the development of Revision E which was released in March 2023, which includes a new table listing specific stress tests and requirements for fuse qualification.

In surface mount Littelfuse offers **885 Series** Nano2® Fuse is 500VDC high voltage DC rated Surface Mount fuse with high interrupting current rating up to 1500 A targeted for battery management, senseline fuse and on-board chargers. The **Nano2 881 series** is also AEC-Q200 qualified targeted for Li-ion battery pack protection.

Littefuse also offers AEC-Q200 qualified high voltage; high current cartridge fuses rated at 500 V (**526 Series**, **527 Series**) and 1000 V DC (**828 Series**) ideal for on-board chargers and power distribution units in electric vehicles.

Littelfuse is a leader in fuse accessories including fuse holders and blocks

Littelfuse offers a wide variety of fuse accessories like fuse holders, fuse blocks and clips ideally for securing, testing, or removing any type of fuse in every kind of application. Some of our top runners include



- 354 Series: OMNI-BLOK® Molded Base Fuse Block for 3AB/3AG Fuses

- 520 Series Metric OMNI-BLOK® Molded Base Fuse Block for 5×20mm Fuses

- 658 Series Molded Base Surface Mount Fuse Block for 5×20mm

- 345 HV Series Panel Mount Enclosed Fuse Holders

- 1503 Series In-Line Fuseholders for 1/4" x 1-1/4" (3AG/3AB) Fuses

Orderable Series at arrow.com

- Surface Mount: 881, 871, and 885 series
- Cartridge Fuse: 526, 527, and 828 series
- Fuseholders: 345HV, 150322, 656, 658, 354, and 520 series

Technologies by Supplier

	Connectors													Antennas, Batteries, Emech								Passives															Power Supply			
	Sockets & Contacts	Board to Board	Wire to Board / Wire to Wire	FFC / FPC	Terminal Blocks & Acessories	I/O Connectors	Industrial Connectors	Fiber Optic	High Speed	RF Connectors	Cables	Cable Assemblies	Cable Management Accessories	Relays	Switches	Thermal Management	Batteries	Antennas	Sensors	Test & Measurement	Enclosures	Soldering Tools / Accessories	Ceramic Capacitors	Silicon Capacitors	Tantalum Capacitors	Aluminum Capacitors	Film Capacitors	Super Capacitors	Fixed Resistors	Non Linear / Variable Resistors	Fuses	Varistors	Inductors / Chokes / Coils	Ferrites / Ferrite Beads / EMI Filter	EMC Power Filters	Planar Magnetics	Transformers	Thermistors	Timing Devices	Buzzer	RF Products	AC/DC	DC/DC	EMI Filter	LED Driver
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*not in all EMEA countries
[1]ABB, GE Critical Power, Lineage [2]Artesyn, Excelsys, Ultravolt, SL Power [3]Acquired by Bel Fuse Inc. [4]3Y Power Technology, Protek Power [5]Yageo company [6]Schaffner fully owned by TE

Technologies by Supplier

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Samsung Electro-Mechanics																							•						•				•	•									
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Traco Power																																									•	•		
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*not in all EMEA countries
[1]ABB, GE Critical Power, Lineage [2]Artesyn, Excelsys, Ultravolt, SL Power [3]Acquired by Bel Fuse Inc. [4]3Y Power Technology, Protek Power [5]Yageo company [6]Schaffner fully owned by TE

Enabling Engineers to Meet Energy Demands

molex

Discover Molex high-power solutions suitable for ever-evolving energy systems.

The industry is undergoing a convergence of two pivotal and closely linked themes: **electrification and energy management.** In electrification, technologies using conventional fuel sources are supplemented with or replaced by equivalent systems powered by renewable energy.

Energy management refers to the storing, monitoring, and distribution of energy. These trends are predicated on three tectonic shifts in the energy landscape: those occurring at the source of generation, the point of consumption, and in the design of the technologies themselves.

Enabling engineers to meet design demands

In response to ever-evolving energy systems, Molex offers a comprehensive portfolio of connector solutions, sensors, busbars and more, to ensure high currents move safely through assemblies without sacrificing performance or reliability.

PowerPlane Busbar Connectors

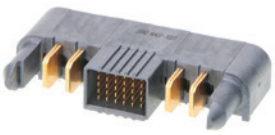
- Float-mount design allows up to +/- 1.00 mm of misalignment, facilitating blind mating in deep racks
- One part number mates with 3.00- and 3.18 mm-thick busbar tabs, giving designers options for enhanced performance while meeting various system requirements
- Multiple, independent points of contact allows for 40 % more points of contact than competitors do for high reliability and enhanced performance

Percept Current Sensors

- Accurate current sensing in an easy-to-install package – up to 86 % lighter and half the size of other busbar current sensors
- High accuracy across temperature range and lifespan
- Versatile and configurable design options: current ranges of +/-450.0 to +/-1,600.0 A; full-differential, semi-differential or single-ended output modes

EXTreme Ten60 High-Power Connectors

- Allows designers space-saving flexibility by utilizing a dovetail design to offer many combinations of signal and power connections
- Blind-mate top and side guides: Offer a +/-1.80 mm gatherability for X and Y directions when used in blind-mate applications
- Connectors may be used with split/ low-power blades mixed with standard/ high power blades for the appropriate amperage and voltage of an application



Molex supports this energy transformation with innovative high-power connector solutions and busbars.

Scan to watch our latest Tech Snack video on arrow.com to learn more

Orderable connectors at arrow.com

- PowerPlane
- Ten60

G9KC PCB Power Relays: Efficient Wallboxes

G9KC PCB Power Relay 480 VAC 40A, compact, low contact resistance, low heat generation, boosts durability, saves energy

Applications:

- EV Chargers: Optimized for three-phase AC chargers, ensuring lower heat generation, shorter charge cycles times, and compact designs.
- Battery Systems and Energy Storage: Reliable performance for energy-efficient high power density, sustainable storage solutions.
- PV and Hybrid Inverters: Ideal for clean energy systems requiring high power and compact components.
- Uninterruptible Power Supplies (UPS): Ensures dependable switching for critical backup systems.

Scan QR-Code to find more information on arrow.com

The **G9KC PCB Power Relay** sets a new standard in efficiency and durability for demanding applications like EV chargers, battery systems, PV inverters, hybrid inverters, and uninterruptible power supplies (UPS). Designed to minimize energy loss and help extend the electrical life of your products, this compact relay is a game-changer in demanding latest generation inverter based products.

Key Features

- Compact Design: Space-saving dimensions (W35 mm x L58 mm x H47 mm).
- High Power Rating: Supports 480 VAC 40 A with 4-pole switching.
- Low Contact Resistance: Initial value ≤6 mΩ for reduced heat generation.
- Auxiliary Contact Option: Compliant with IEC 60947-4-1 mirror contact requirements.
- High Short Circuit capability: Meets IEC 62955 standards to 10 kA.
- Low Coil Power Consumption: Approximately 613 mW with holding voltage at 35 %.
- Durable Performance: Electrical durability up to 50,000 cycles at 277 VAC 32 A and 30,000 cycles at 480 VAC 40 A.

Benefits

- Improved Durability: Reduced local heating lowers stress on adjacent components, extending equipment electrical lifetime.
- Energy Efficiency: Lower power consumption and heat generation improve overall system efficiency.
- Compact and Versatile: Enables smaller and lighter designs while maintaining high performance.
- Automated Production Ready: PCB-mountable design reduces assembly labour and wiring errors, helping improve quality assurance.

The G9KC is engineered to meet the demands of high-performance, energy-efficient systems, combining innovative design with robust reliability. Upgrade your application today with the G9KC PCB Power Relay.

Orderable Part Numbers at arrow.com

- G9KC-4A1B DC12
- G9KC-4A DC12
- G9KC-4A DC24
- G9KC-4A1B DC24

VeriSafe Absence of Voltage Tester

Introducing the VeriSafe™ Absence of Voltage Tester: The Safe Way to Verify the Absence of Voltage

When servicing electrical equipment, worker safety is paramount. One of the critical safety requirements for de-energized work is verifying the absence of voltage to confirm an electrically safe environment. Traditional testing methods with handheld devices can be time-consuming, complex, and expose workers to unnecessary risks. VeriSafe Absence of Voltage Tester, a revolutionary solution from Panduit, automates this essential process, ensuring safety, reliability, and efficiency.

With VeriSafe, workers can verify the absence of voltage with the push of a button, reducing both the risk of exposure to electrical hazards and the time spent on manual testing.

Designed in accordance with the NFPA 70E standard, the VeriSafe Absence of Voltage Tester helps ensure compliance with safety regulations and simplifies the lockout/tagout procedure. This innovative system also reduces human error, making it easier than ever to establish an electrically safe work condition.

By automating the test sequence, VeriSafe protects workers and improves productivity, delivering a clear, visual confirmation when it is safe to proceed. Whether you're working on three-phase circuits or single-phase systems, this reliable and fail-safe tester is an indispensable tool for electrical maintenance and safety.

Features

- Efficiency: Test results available within 10 seconds with one button.
- Voltage Detection: 600 V or 1000 V
- Absence of Voltage Threshold: 3 V
- Voltage Presence Indicators: AC & DC
- Power: 3.6V Battery powered or DC Power Supply

Benefits

- Improved Process Safety: Minimized human error
- Productivity: Reduced labor costs
- User-Friendly: Simple and quick operation by trained personnel
- Versatile Applications: Data centers, Control panels, industrial and commercial facilities, motor control and automation
- Reliable Test Results: Fail-Safe system

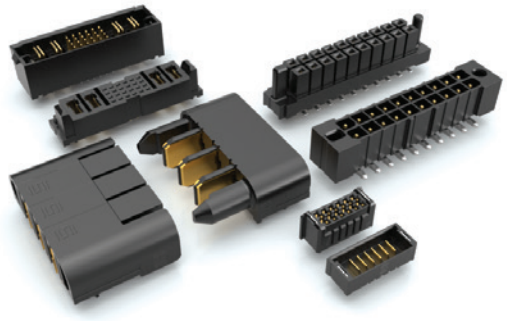
Orderable at arrow.com

- VS-AVT

Scan QR-Code to find more information on arrow.com

Power Blades – the Modern Power Solution

Scan QR-Code to find more information on arrow.com



Modern computing is placing great demands on power connectivity. Providing power to data centres and edge computing devices requires designers to balance small form factors, high current and the need to dissipate heat.

In today's data centre installations, rectangular printed circuit board (PCB) mounted connectors offer the best combination of space-saving design and superior performance. Unlike conventional types that use cylindrical contact designs, connectors using power blades can be fitted with more terminals per centimetre of PCB footprint. Higher circuit count delivers greatest power density. Although slim, power blades provide a large contact surface area when mated.

Power blades therefore offer the best combination of compact design and power efficiency for PCB-mounted connectors. Their slim profile is increasingly important in today's space constrained applications.

The design of blade terminals also assists with thermal management as heat is a serious concern in today's data centre. The thin format of blade terminals delivers superior thermal performance. Its large surface area allows greater airflow around the blade terminal, making it more efficient for dissipating heat when compared to conventional circular pins.

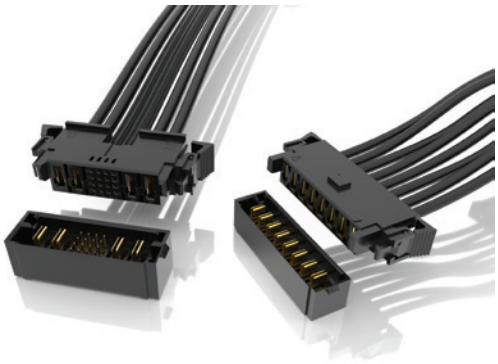
Connectors are some of the largest components that are fitted to PCBs, but when fitted with power blades, connectors for the latest computing applications do not need to be bulky. Samtec high-current connectors equipped with power blades provide a range of solutions for the electronic design engineer and data centre architect.

Samtec solutions include the low profile of the mPOWER® connector system (UMPx), which delivers up to a 40 % space saving when compared to traditional power connector systems. Also available is the 60 Amp performance of the EXTreme Ten60Power™ family (ET60x). With up to 20 power blades, and delivering a low-profile design of just 10 mm, this highly capable connector delivers the power density demanded by the latest computing applications.

Key Features

- Comprehensive range of power and mixed-density connectors
- Current ratings up to 60 amps per blade
- Small PCB footprint and low stacking height
- Ideal for high-performance computing applications

Orderable Series at arrow.com
UMPT, UMPS, UMPC, UMPE, UMPI, ET60T, and ET60S



TDK Time-of-Flight Ultrasonic Sensor Module

Ultrasonic Sensor Module for Touchless Object Detection and Level Sensing at harsh environmental conditions

Ultrasonic Sensor Module for Touchless Object Detection and Level Sensing
Strong market trends like the growing use of autonomous guided vehicles in logistics, the increasing number of industrial robots in production processes and smart monitoring of filling levels in tanks require reliable technology for object detection and measurement.

Technologies like radar or lidar are often too expensive and need too high supply power for such applications. Infrared usually has too little measurement range, is sensitive to sunlight, and can't detect glass. TDK's Ultrasonic Sensor Module has the benefits of touchless sensing, insensitivity to sunlight and dark objects, detectability of glass, wide field-of-view coverage, and low power consumption.

Ultrasonic Sensor Module Key Advantages
Compared to other ultrasonic sensors, TDK's Ultrasonic Sensor Module stands out with its very compact dimensions and robust aluminum housing. This housing protects the sensor from dust and splash water according to IP65/67; therefore, it can even be used for applications in harsh environmental conditions. The integration effort is also low, because the sensor is fully integrated and already contains an integrated driver and signal processor and piezo disk.

Furthermore, a decoupling element is already part of it and therefore chassis vibration will not influence on the ultrasonic measurement behavior of the sensor. The ultrasonic sensor module is delivered with a pre-programmed EEPROM with a standard measurement range of 18 to 500 cm, but it also has additional internal RAM for customer individual settings.

Furthermore, it has high electromagnetic compatibility and excellent noise suppression.

Evaluation Kit and Software
TDK supports the customer's design process by providing a demo kit including 1x TDK demo board, 2x Ultrasonic Sensor Modules, and the needed cables. Furthermore, customers can download the TDK demo board software and an Arduino library for easier measurement at TDK's Ultrasonic Sensor Module landing page. There, customers can also download helpful information regarding the programming of the integrated driver and signal processor. Finally, in case of additional questions customers can find the contact data of our TDK Sales offices and partners.

Orderable Part Number at arrow.com
- B59110W2111W032

Scan QR-Code to find more information on arrow.com

Aluminium housed & Wire wound Power Resistors

TE Connectivity Power Resistors for BESS applications. Suitable for pre-charge and discharge systems. High stability and power.

Applications:
- Battery energy storage systems
- Electric vehicle industry
- Motion & Drives
- Servo drivers
- Automotives

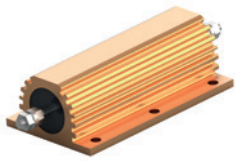
TE Connectivity is one of the leading suppliers of standard and custom designed aluminium housed resistors for industrial applications. Two new additions to the standard **HS Series** were launched in mid-2024: The screw termination type (HSCS) for 75 W, 100 W and 150 W and higher power ratings from 350 W to 500 W to the existing standard termination portfolio.

The **TE Series** range of flameproof coated tubular ceramic core resistors use both standard and edge wound (corrugated) winding methods to improve power handling capability. Designed for heavy duty machinery, electrical equipment, motor control etc. requiring stability and reliability.

TE Cement Housed High Power Resistors, **SQ Series**, have wire or power oxide film elements wounded or deposited on a fine non-alkali ceramic core then embodied in a ceramic case and sealed with an inorganic silica filler. This design provides a resistor with high insulation resistance, low surface temperature, excellent T.C.R., and entirely fireproof construction. We offer them on different styles for being mounted on PCBs or chassis.

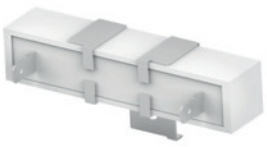
Features and Benefits

HS series
- High range offerings.
- HS from 5 Watts to 500 Watts among the largest range on the market.
- Soldering and screw terminations available.
- High acceptability due to custom design offerings on demand.
- Capable of dissipating high power in a limited space with relatively low surface temperature.



TE series
- Up to 2500 W Power rating in free air.
- Flameproof construction – UL94V coating.
- Custom terminations / leads available.

SQ series
- Power ranges from 2 W to 60 W.
- AEC-Q200 qualification on certain models.
- Inorganic flame-resistant construction.
- Anti-pulse load capability on select models.
- Higher stability from available bracketed types.
- Wide value range based on power requirements and pulse load capabilities.



Scan QR-Code to find more information on arrow.com

Orderable Part Numbers at arrow.com
- HSC10075RJ
- HSC1002R2J
- HSA50R50J
- HSA2515RJ
- TE2000B1R0J
- TE2500B10RJ
- TE2000B10RJ
- TE750B1R0J
- SQMR722KJ
- SQMW547RJ
- SQZW2010RJ
- SQPW547RJ

Vishay Equivalents-Drum Core Power Inductors

The DNA of tech.

New Vishay Equivalents for Industry-Standard Drum Core Power Inductors

Vishay Intertechnology announces that it has extended its shielded IFDC and semi-shielded IFSC series of wirewound, surface-mount ferrite inductors with three new devices in the 2020DE, 3232DB, and 5050HZ case sizes. Offering improved performance at a lower cost than previous-generation ferrite solutions, the Vishay Dale inductors combine higher inductance and current ratings with lower DCR for computer and consumer applications.

To simplify your inductor sourcing process, Vishay is adding a host of new products that fill out our inductor portfolio with more device options at a wider range of price points. These products will provide you with additional options for designs where achieving a specific price / performance ratio is key.

As the first group of these products, today we're announcing the availability of Vishay equivalents for more than a dozen industry standard drum core families. All will be available from our distributors beginning this month.

These new products are designed to offer comparable solutions to those provided by other industry standard devices.

To learn more about product specifics, and to check availability at the Sample Order Center and at Arrow, please contact Arrow sales representative.

Product Benefits

- Provide enhanced efficiency while lowering costs
- Offered in 2020DE, 3232DB, and 5050HZ case sizes
- Shielded and semi-shielded inductors available
- Enhanced performance:
  - Operating temperatures to +125 °C
  - Operating voltages of 120 V
  - DCR down to 6 mOHm
  - Saturation currents to 14 A
  - Maximum inductance to 1 mH
- Utilize efficient manufacturing techniques
- Feature a simple bobbin style wirewound construction
- Minimize EMI and crosstalk to nearby components (IFDC-5050 HZ)

Orderable Series at arrow.com

- IDCP2218
- IDCS3014
- IFDC5050
- IFSC1616
- IFSC2020
- IFSC3232
- IMSC1008

Market Applications:

- Battery-powered consumer electronics
- Entertainment devices such as televisions, sounds bars, and audio and gaming systems
- General computing equipment such as desktops, monitors, and scanners
- Household appliances

Product Type	Semi-shielded Ferrite Power Inductors	Shielded Ferrite Power Inductor	Unshielded SMD Ferrite Power Inductors	Shielded Ferrite Power Inductor	Semi-shielded Ferrite Power Inductorsw
Series	**IFSC2020DE-01** 6x6x4,5mm **IFSC3232DB-01** 8x8x4,2mm	**IFDC5050HZ** 12,3x12,3x8mm	**IDCP2218-01** 5,8x5,2x4,5mm **IDCP3020-01** 7,8x7x5mm	**IFDC2020CZ** (6x6x3mm) **IFDC2525DZ** (7x7x4mm) **IFDC3030EZ** (7,8x7,8x5mm) **IFDC5050JZ** (12,5x12,5x10mm) **IDCS3014** (7,6x7,6x3,5mm)	**IFSC1616AH-01** (4x4x1,8mm) **IFSC2020BZ-01** (5x5x2mm) **IFSC2020DE-02** (6x6x4,5mm) AECQ **IFSC2020DZ-01** (5x5x4mm) AECQ **IFSC3232DB-02** (8x8x4,2mm) **IMSC1008AZ** (2,5x2x1mm)
Appearance					

Arrow Electronics, Inc.
Components
Frankfurter Straße 211
63263 Neu-Isenburg, Germany

In Person
+49 (0) 6102 5030 0
Call to talk or set up a face-to-face meeting with one of our knowledgeable representatives.

Online
arrow.com
Visit our website for everything from the latest news to line card information.

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Five Years Out