

harlingen s.r.o.

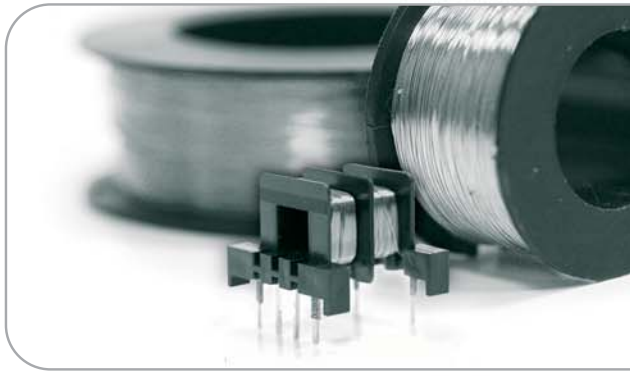


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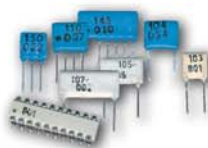
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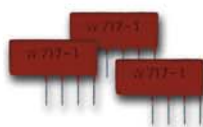
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MKP lighting capacitor type TC 844

Application:

- MKP capacitors TC 844 are particularly designed for parallel compensation in circuits of lighting units.

Electrical properties:

- Nominal capacitance: 2 to 65 μF .
- Tolerance of capacitance: $\pm 10\%$ (K), $\pm 5\%$ (J)
- Nominal voltage: Un 250 Vac 50Hz
- Test voltage between terminals: 2 x Un. 50Hz / 60s
- Test voltage between terminals and case: 2000V 50 Hz / 60s

Type marking of capacitors:

1st letter indicates type of terminals

- E...soldering tags without a discharging resistor.
- A...soldering tags with a discharging resistor.
- P...push-wire adapter with an integral discharging resistor.

2nd letter indicates case fixing system

- B...case without a base stud.
- S...case with a base stud M8 x 10mm (a nut and a washer are included).

Example of marking for an order:

TC 844 PS 5 μF $\pm 10\%$ - lighting capacitor for parallel compensation in an aluminium case with a base stud and a push-wire adapter with an integral discharging resistor. Capacitance is expressed in μF with tolerance $\pm 10\%$.



MKP lighting capacitor type TC 884

Application:

- MKP capacitors TC 884 are particularly designed for parallel compensation in circuits of lighting units.

Electrical properties:

- Nominal capacitance: 2 to 70 μF
- Tolerance of capacitance: $\pm 10\%$ (K), $\pm 5\%$ (J)
- Nominal voltage: Un 250 Vac 50Hz
- Test voltage between terminals: 2 x Un. 50Hz / 60s
- Test voltage between terminals and case: 2000V 50 Hz / 60s

Type marking of capacitors:

1st letter indicates type of terminals.

- R . . . integrated push-wire connector with a discharging resistor.
- L . . . insulated flexible wire outlets, 0,75 mm, length 120 mm, go axial through cover, discharging resistor is inside the case.
- I . . . insulated wire outlets $\varnothing 0,8$ mm, length 120 mm, go axial through a plastic cover, discharging resistor is inside the case – another type of terminal or length is necessary to discuss with producer.

2nd letter indicates case fixing system.

- Q...quick fit system.
- B...case without a base stud.
- S...case with a base stud M8 x 10 mm (a nut and a washer are included).

Example of marking for an order:

TC 884 RQ 5 μF $\pm 10\%$ - lighting capacitor for parallel compensation in a quick fit case with a push-wire cover, with a discharging resistor. Capacitance is expressed in μF with tolerance $\pm 10\%$.



MKP lighting capacitor type TL 201

Application:

- MKP capacitors TL 201 are particularly designed for parallel compensation in circuits of lighting units.

Electrical properties:

- Nominal capacitance: 2 to 55 μF
- Tolerance of capacitance: $\pm 10\%$ (K), $\pm 5\%$ (J)
- Nominal voltage: Un 250 Vac 50Hz
- Test voltage between terminals: 2 x Un. 50Hz / 60s
- Test voltage between terminals and case: 2000V 50 Hz / 60s

Type marking of capacitors:

1st letter indicates type of terminals.

- P . . . push-wire adapter with an integral discharging resistor.
- R . . . integrated push wire connector with a discharging resistor.
- I . . . insulated wire outlets $\varnothing 0.8\text{mm}$, length 120mm, go axial through a plastic cover, discharging resistor is inside the case.

2nd letter indicates case fixing system

- B . . . case without a base stud
- S . . . case with a base stud M8 x 10mm (a nut and a washer are included)

Example of marking for an order:

TL 201 RS $5\mu\text{F} \pm 10\%$ - lighting capacitor for parallel compensation in an aluminium case with a base stud and with a push-wire cover, with an integral resistor. Capacitance is expressed in μF with tolerance $\pm 10\%$.



MKP lighting capacitor type TL 501

Application:

- MKP capacitors TL 501 are particularly designed for parallel compensation in circuits of lighting units.

Electrical properties:

- Nominal capacitance: 2 to 10 μF
- Tolerance of capacitance: $\pm 10\%$ (K), $\pm 5\%$ (J), $\pm 4\%$
- Nominal voltage: U_n 450 Vac 50Hz
- Test voltage between terminals: $2 \times U_n$ 50Hz / 60s
- Test voltage between terminals and case: 2500V 50Hz / 60s

Type marking of capacitors:

1st letter indicates type of terminals

- A . . . soldering tags with a discharging resistor.
- E . . . soldering tags without a discharging resistor.
- P . . . push wire adapter with an integral discharging resistor.

2nd letter indicates case fixing system

- B . . . case without a base stud
- S . . . case with a base stud M8 x 10mm (a nut and a washer are included)

Example of marking for an order:

TL 501 PS $5\mu\text{F} \pm 10\%$ - lighting capacitor for parallel compensation in an aluminium case with a base stud and with push wire adapter with an integral discharging resistor. Capacitance is expressed in μF , with tolerance $\pm 10\%$.



Motor MKP capacitor type TC 886

Application:

- The capacitors TC 886 are determined especially for start of alternating-current asynchronous motors which can be energized from mono phase or three phase network.

Electrical properties:

- Nominal capacitance: 1,5 μF to 100 μF
- Tolerance of capacitance: $\pm 10\%$ (K), $\pm 5\%$ (J)
- Nominal voltage: Un 500 Vac 50Hz
- Test voltage between terminals: 2 x Un 50Hz/60s
- Test voltage between terminals and case: 2000V 50Hz/60s

Type marking of capacitors:

1st letter indicated type of terminals

- M . . . single faston tag 2,8 x 0,5 mm (only for $\varnothing D = 25$ mm)
- J . . . single faston tag 6,3 x 0,8 mm
- X . . . single faston tag 6,3 x 0,8 mm not standardly turned
- D . . . double faston tag 2 x 6,3 x 0,8 mm
- H . . . outlet cable, length 250 mm
- L . . . insulated flexible wire outlets, cross section 0,75 mm², length 200 mm (except $\varnothing D = 45, 50$ and 55 mm)
- I . . . insulated wire outlets, $\varnothing 0,8$ mm, length 210 mm (except $\varnothing D = 45, 50$ and 55 mm)

2nd letter indicates case fixing system

- B . . . case without a base stud M8 x10 mm
- S . . . case with a base stud M8 x 10mm (a nut and a washer are included)

Example of marking for an order:

TC 886DB 5 μF $\pm 10\%$ - motor capacitor for start of asynchronous motors in plastic case without a base stud, outlets are made with double faston tags, capacitance is expressed in μF with tolerance $\pm 10\%$.



Motor MKP capacitor type TM 451

Application:

- MKP capacitors TM 451 are determined especially for start of asynchronous motors. They can operate as motor run capacitors in permanent operations.

Electrical properties:

- Nominal capacitance: 16 to 220 μF
- Tolerance of capacitance: $\pm 10\%$ (K), $\pm 5\%$ (J)
- Nominal voltage of starting operation: Un 350 Vac 50Hz
- Nominal voltage of permanent operation: Un 250 Vac 50Hz
- Test voltage between terminals: 2 x Un for permanent operation 50 Hz / 60 s
- Test voltage between terminals and case: 2000 V 50 Hz / 60 s

Type marking of the capacitors:

1st letter indicates type of terminals

- H . . . outlet cable, length 250 mm, goes completely through an axial-plastic cover

2nd letter indicates type of terminals

- B . . . case without a base stud M8 x 10 mm
- S . . . case with a base stud M8 x 10mm (a nut and a washer are included)

Example of marking for an order:

TM 451 HB 100 $\mu\text{F} \pm 10\%$ - motor start capacitor for start of asynchronous motors in a plastic case without a base stud, with outlet cable. Capacitance is expressed in μF with tolerance $\pm 10\%$.



Motor MKP capacitor type TM 471

Application:

- MKP capacitors 471 are determined for start and operation of single phase or three phase asynchronous motors, which are single phase energized. They can operate in permanent operations as run capacitors.

Electrical properties:

- Nominal capacitance: 2 to 60 μF
- Tolerance of capacitance: $\pm 10\%$ (K) , $\pm 5\%$ (J)
- Nominal voltage: Un 480 Vac 50Hz
- Test voltage between terminals: 2 x Un 50Hz / 60s
- Test voltage between terminals and case: 2000V 50Hz / 60s

Type marking of capacitors:

1st letter indicates type of terminals

- J . . . single faston tag 6,3 x 0,8 mm
- D . . . double faston tag 2 x 6,3 x 0,8 mm (except $\varnothing D = 30$ mm)
- E . . . soldering tags without a discharging resistor
- K . . . outlet cable with pressed protective cap

2nd letter indicates case fixing system

- B . . . case without a base stud
- S . . . case with a base stud M8 x 10mm (a nut and a washer are included)

Example of marking for an order:

TM 471 JS 20 $\mu\text{F} \pm 5\%$ - motor capacitor for start and operation of single phase or three phase asynchronous motors in an aluminium case with a base stud, outlets are made with single faston tags. Capacitance is expressed in μF with tolerance $\pm 5\%$.



Motor MKP capacitor type TC 851, TC 853

Application:

- MKP capacitors TC 851 and TC 853 are determined especially for asynchronous motors, which can be energized from mono phase or three phase network. These capacitors are also suitable for other application e.g. in DC circuits. MKP capacitors can operate in permanent operations as run capacitors or in intermittent operation. Intermittent operation can be arranged with a customer.

Electrical properties:

- Nominal capacitance: 0,1 μ F - 10 μ F (TC 851)
0,1 μ F - 5 μ F (TC 853)
- Tolerance of capacitance: \pm 10%(K), \pm 5%(J)
- Nominal voltage: Un 250 Vac 50Hz (TC 851)
Un 400 to 450 Vac 50Hz (TC 853)
- Test voltage between terminals: 2 x Un 50Hz / 60s
- Test voltage between terminals and case: 2000V 50Hz / 60s

Type marking of the capacitors:

1st letter indicates case fixing system

- A ... case is suitable for PCB
- B ... case with holder for screw M4

2nd letter indicates type of terminals

- 1 ... outlet wire \varnothing 0,8mm, length 6mm
- 2 ... insulated wire 0,75mm², length 110mm
- 3 ... single soldering tags
- 4 ... spade connector 6,3 x 0,8mm
- 5 ... spade connector 4,8 x 0,8mm
- 7 ... insulated wire \varnothing 0,8mm, length 110mm

Example of marking for an order

TC 853 B7 5 μ F \pm 10% 450V motor capacitor for asynchronous motors in plastic case with holder and with a wire insulated terminals. Capacitance is expressed in μ F with tolerance \pm 10%. It is necessary for order to complete combination of letter and number. The type number is not valid without the extension.



Noise-suppressing capacitor class X2 TYPE TD 232

Application:

- Capacitor TD 232 is determined especially for noise-suppressing of electric appliance. It is intended for connecting between supply leads with voltage up to 300Vac 50(60) Hz.

Electrical properties:

- Nominal capacitance: 33nF to 1 μ F.
- Tolerance of capacitance: $\pm 20\%$ (M), $\pm 10\%$ (K).
- Nominal voltage: 300 Vac 50 (60)Hz.
- Test voltage between terminals: 1290Vss / 2 s.

Type marking of the capacitors:

- A1 ... copper tinned wires \varnothing 0,8mm, length 6mm
- A2 ... wires LYQJ length 110mm
- A6 ... copper tinned wires \varnothing 0,8mm, length 20mm
- A7 ... copper tinned wires \varnothing 0,8mm, length 40mm, with PVC wire insulation

Example of marking for an order

TD 232 A2 220/nF / M. Noise-suppressing capacitor 220nF with wire terminals, tolerance is $\pm 20\%$ and length 110mm.



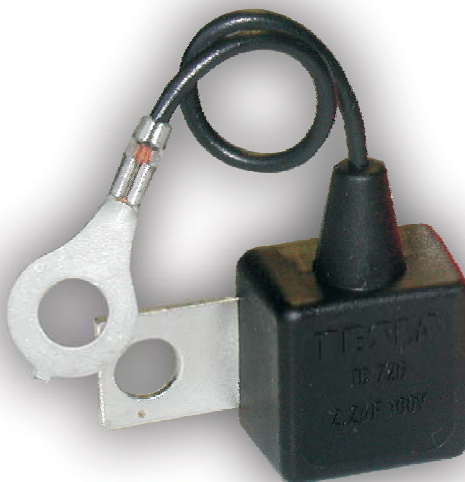
Noise-suppressing capacitors TC 726

Application:

- In motor vehicles as a protection against undesirable high-frequency interference in the range of working temperatures from -40 to +100°C.

Design:

- Non-coaxial noise-suppressing capacitors with polyester dielectric in a plastic case.
- Fastening using a fastener with an opening pressed in a case.
- One outlet forms a cable ended with a cable eye, the second outlet is an assembly fastener, the cable length and the end design can be adapted to the customer's requirements.
- Rated capacity 2.2 μF .
- Rated voltage 100 V DC.



Noise-suppressing filter WK 852 01, WK 852 03

Application:

- Noise suppression of electric accessories (instruments and equipment) in a motor vehicle.

Design:

- Tight LC filter connected as a π cell is formed by two capacities and inductance with a ferrite core.
- Types WK 852 01 and WK 852 03 differ in the shape of the end cylinder case.
- Outlets for connection to the battery and the appliance pass through a cast in the faces of the case, common outlet is formed by a case.
- Two assembly fasteners are supplied as accessories with the design WK 852 03.
- Passing current max. 6 A.
- Rated voltage 100 V DC.
- Damping up to 90 dB.
- Rated capacity 2 x 1.5 μF .
- Rated inductance 80 μH .



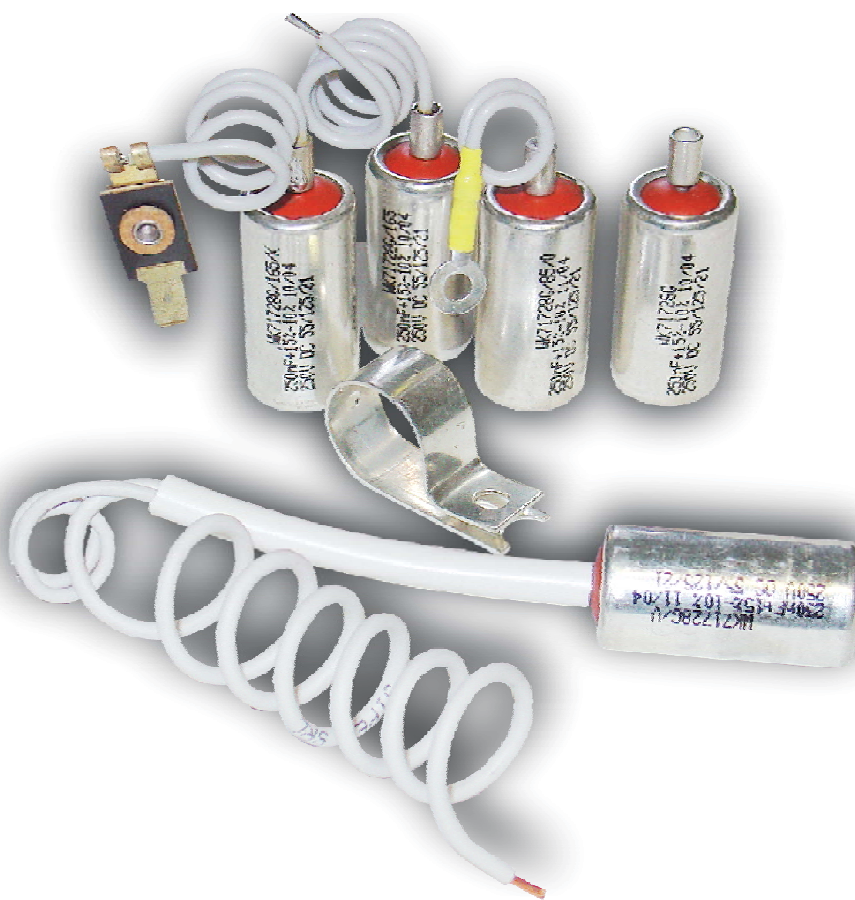
Capacitors for ignition WK 717 28G ...

Application:

- In the motor vehicle ignition systems.
- Working operation range from -55°C to 125°C.

Design:

- Capacitors with paper dielectric tightly closed in a steel tin-plated case.
- A case is formed by one outlet, the second outlet passes through the case packing and it is designed according to specific use – welding pin, non-insulated cable, cable ended with a cable eye or cable ended with a connector, the cable length and the end design can be adapted to the customer's requirements.
- It is possible to deliver capacitors clips.
- Rated capacity 250 nF.
- Rated voltage 250 V DC.



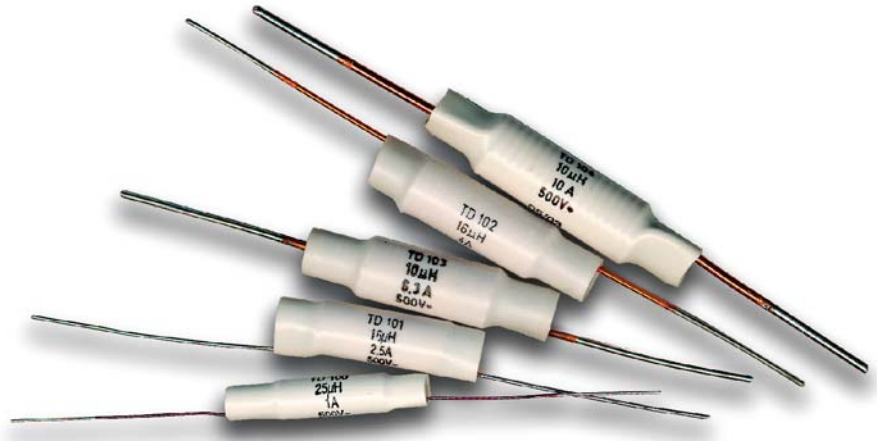
Noise-suppressing chokes for VHF band TD 100 - TD 104

Application:

- For suppression of undesirable high-frequency voltages formed in electric equipment of general use and interfering with reception of wireless communication means

Design:

- Rod ferrite core with coiling of copper varnished wire.
- The coiling is fitted with a PVC insulating pipe, the outlets form extended coiling ends, outlet ends are tin-plated.
- Rated inductance 1.6 - 25 μ H.
- Rated current 1- 10 A.
- Rated voltage 500 V AC.



Cermet resistance trimmers TP 095

Application:

- For setting the working point of electronic circuits with the possibility of changing the set resistance as needed.

Design:

- Resistor track made of a cermet layer on a ceramic substrate.
- Metal case.
- Control shaft with a groove for a screw-driver.
- Wire, surface finish outlets designed for assembly of printed circuit boards, not designed for bending.
- Rated resistance 100 Ω - 1 M Ω (in series E6).
- Linear course of the resistance path.
- Rated load 0.5 W.
- Maximum operating voltage 150 V DC.



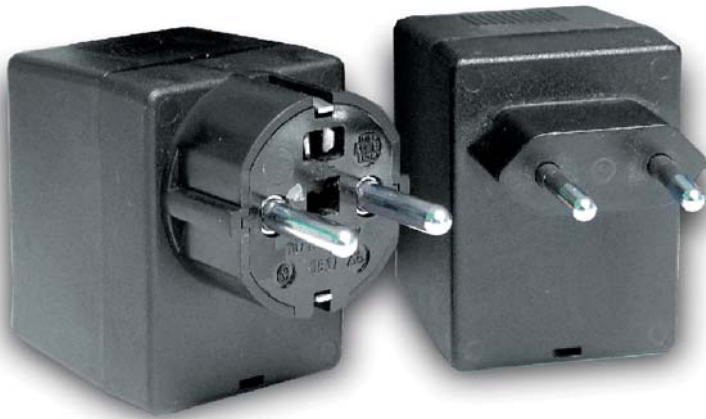
Cases for power units WF 260 30, WF 260 31

Application:

- For assembly of power units for general use

Design:

- The case made of thermoplastic is composed of two parts, connection by catches and gluing.
- It is supplied with a glued-in and mechanically secured fork with connected insulated conductors
- WF 260 30 - design with fork UNISCHUKO
- WF 260 31 - design with a flat fork type VM-2 N2527 without the grounding pin
- The case cover is fitted with a sunken area for gluing a sticker, possibility of supplying with a hole for an indication LED diode.



Cases for power units WF 260 40 - WF 260 48

Application:

- For assembly of power units for general use

Design:

- The case made of thermoplastic is composed of two parts, connection by a catch and screws
- It is supplied with a glued-in and mechanically secured fork of type VM-2 N2527 without a grounding pin with connected insulated conductors and a cable bushing
- The differences between individual types are in the spacing of the support pins for the transformer and the case material
- The case cover is fitted with a sunken area for gluing a sticker, possibility of supplying with an opening for an indication LED diode



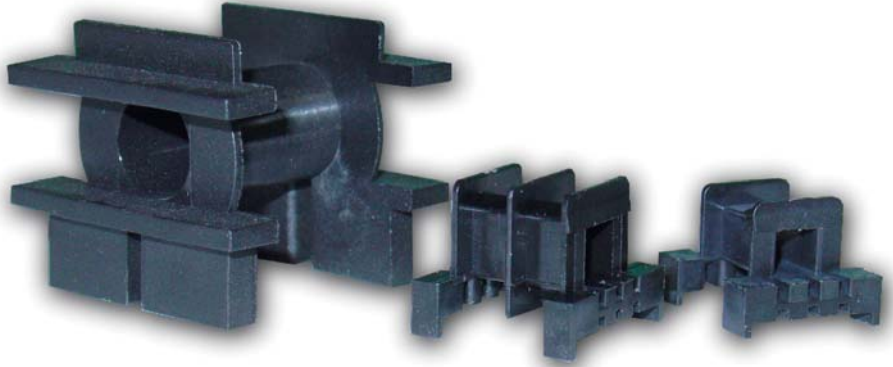
Coil formers WA 260 31, 32, 34, 36, 40, 85, 86

Application:

- For assembly of coils, chokes, and transformers for general use

Design:

- For production of formers, the following material is used: PA6 Slovamid 6 GF 30 - black, PA6 Spolamid 30SV PND 30-049 black, and PA6 +SV Silamid 13.01 E SV 30 black
- According to the customer's requirements, it is possible to fit formers with pins.



Foot switch WN 825 10 E

Application:

- Switching of electric appliances with rated voltage 230 V AC/50 Hz

Design:

- The switch is placed in a box of thermoset with a moving lid serving as a pedal, the switch is controlled by pushing the pedal.
- Rated voltage 230 V AC $\pm 10\%$, 50 Hz.
- Rated current 4 A.
- Force needed for complete compression of the pedal max. 50 N.



Foot speed regulator WN 825 10, WN 825 10B

Applications:

- Speed regulation of motors of sewing machines with grid power supply 230 V AC/50 Hz

Design:

- The regulator is placed in a box of thermoset with moving lid serving as a pedal, regulation is performed by gradual pushing
- Regulation is resistance, gradual (6 resistance levels + direct connection to the grid), in the pedal rest condition, the regulation is switched off.
- WN 825 10 - the regulator is fitted with a fixed connected flexible conduit with a connector for connecting the sowing machine and a grid fork
- Rated voltage 230 V AC $\pm 10\%$, 50 Hz
- Resistance regulation range 0 to 540 Ω , $\pm 20\%$
- Rated current 0,4 A
- Output regulation max. 90 W
- Minimum permitted impedance of load 500 Ω
- Force necessary for complete pushing of the pedal max. 50 N
- WN 825 10B - design without flexible conduit with a connector for connecting the sowing machine and a grid fork.



Nickel temperature sensors Ni 5000, Ni 6180

Application:

- Temperature measuring in regulation and measuring equipment.

Design:

- Thermally dependant resistance layer deposited by sputtering on a ceramic substrate, surface finish with protective lacquer, Ni 5000 – blue colour, Ni 6180 – orange colour, wire outlets.
- Thermal coefficient 5000 ppm/K and 6,180 ppm/K according to DIN 43760.
- Values of rated resistance at 0 °C: Ni 5000 – 1000 Ω , Ni 6180 – 1000 Ω (other values as agreed)
- Tolerance in classes A and B correspond to DIN 43760, classes C and D are furthermore offered.



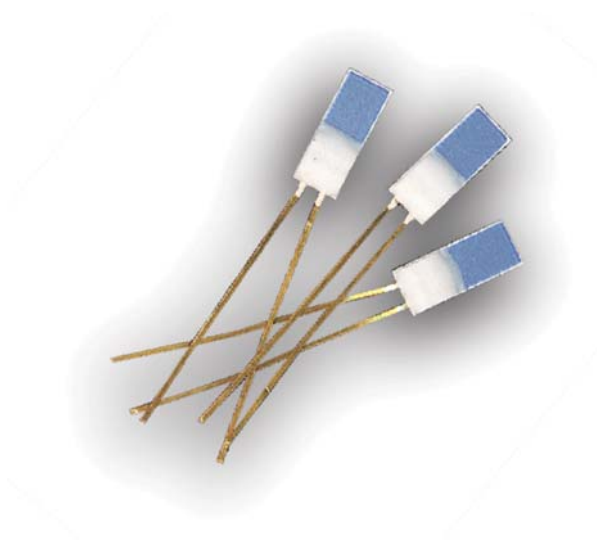
Platinum temperature sensors 3850

Application:

- Temperature measuring in regulation and measuring equipment.

Design:

- Temperature dependant resistance layer deposited by sputtering on a ceramic substrate, wire outlets.
- Temperature coefficient 3850 ppm/K according to IEC 751.
- Values of rated resistance at 0 °C: 100 Ω and 1000 Ω .
- Tolerance in classes A and B correspond to IEC 751.



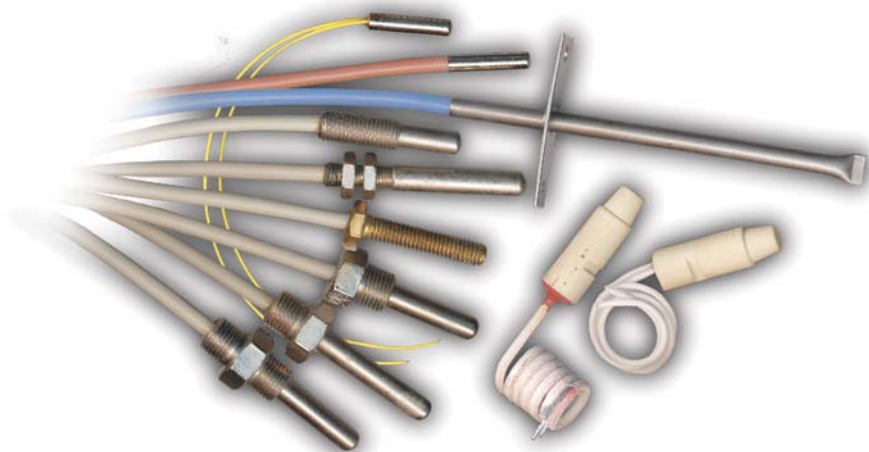
Nickel and platinum temperature sensors in cases (thermal probes)

Application:

- Temperature measurement in regulation and measuring equipment

Design:

- Nickel and platinum temperature sensors can be supplied separately or built into a case, as a thermal probe
- The following designs of cases are offered:
 - Metal cases, material stainless or brass with nickel surface finish
 - Ceramic cases
- The probes are standard supplied with shielded cables with insulation of PVC or silicon, with two separate conductors with insulation of Teflon or silicon, possibly with two-conductor wire conduit with insulation of glass fibre.
- Length and type of cable according to the customer's requirements.



Interior temperature sensor

Application:

- Interior temperature sensor is intended for measuring temperature in range - 30 to 100 °C in chemical inoffensive environment which is protected against water.

Design:

- The sensor is placed in a white plastic box which is made of self - extinguishing material. The sensor is connected by a terminal block.



Thin film precision resistors and resistor networks

Application:

- Measuring instruments
- Regulation equipment

Design:

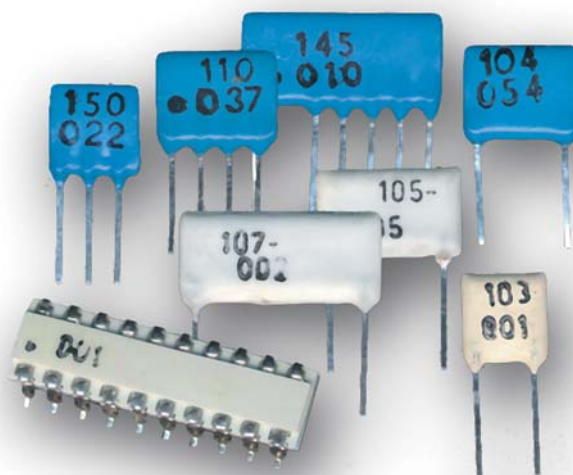
- The base material is a special NiCr alloy, with a very small temperature coefficient and very good stability, deposited on substrate – glass-ceramic Sitall or Al_2O_3 .
- The following processes are used during production:
 - Vacuum sputtering
 - Photo-lithography
 - Laser trimming
- The range of rated values of resistance 0,5 Ω to 10 M Ω .
- Permitted deviation ± 0.01 to 0.5%, according to the customer's requirements.
- Long-term stability <0.05%; typically 0.02%.
- Thermal coefficient $\pm 5, 10, 15, 25, 50$ ppm/ $^{\circ}C$.
- TKR concurrence in a single circuit <1 ppm/ $^{\circ}C/cm$.
- Thermal range -55 $^{\circ}C$ to +125 $^{\circ}C$.
- Outlets SIL Comatel, DIL Comatel, DIL (SMD), spacing 2.54 mm.
- Surface protection silicon rubber or epoxy resin (fluidisation).

Advantages:

- Very low temperature coefficient, within a single circuit excellent concurrence of the temperature coefficient of individual resistors.
- Perfect long-term stability, within the scope of a single circuit excellent concurrence of individual resistor stabilities.

Design possibilities:

- Separate resistors
- Resistor networks
 - Multiple resistors
 - Voltage separators
 - Current separators
 - Special wiring according to the customer's requirements
- Damping cells



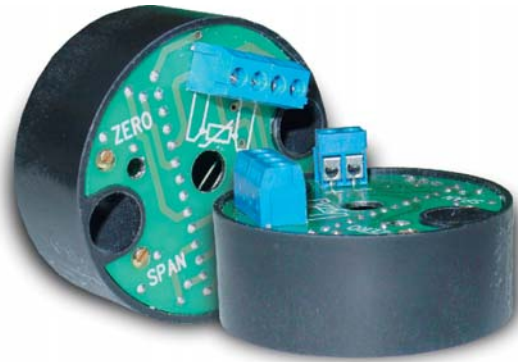
Converter W 073, W 074 for sensor Pt 100

Application:

- Temperature measurement in regulation and measuring equipment.
- Converts the signal from the platinum sensor Pt100 according to IEC 751 to a unified output signal – current loop 4 - 20 mA.
- The powering source of the converter is connected serially with load in the output loop of the converter.

Design:

- Converter circuits made by using thin-layer technology and put using surface assembly into a plastic case.
- The case is designed for building into the sensor head.
- The converter makes the dependency of the output current on temperature linear.
- The conductors from the thermal sensor and the current loop conductors are connected to the screw terminal board. W 073 – three wire connection of the sensor, W 074 – four wire sensor connection.
- Protection against re-poling of the supply voltage, against error shorting or sensor conductor interruption.
- Design in 16 temperature ranges of measuring.



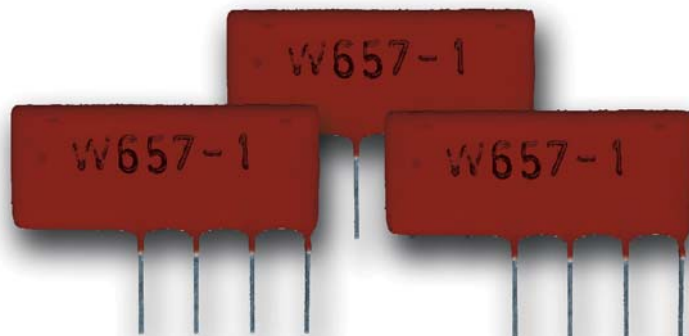
Linear temperature – current converter W 657

Application:

- Temperature measurement in regulation and measuring equipment.
- Converts the signal from a nickel sensor Ni 5000 - 1 k Ω to a unified output signal – current loop 4 - 20 mA.
- Power supply of the converter is connected serially with load in the output loop of the converter.

Design:

- The converter is made using thin-layer technology on a ceramic pad and fitted with components for surface assembly, the surface finish is formed by silicon rubber, strip outlets, tin-plated, which are not designed for inflexion.
- The converter makes the dependency of the output current on temperature linear. Two wire sensor connection.
- Design in 10 temperature ranges of measuring.
- The converter is actively set in the production process – circuit connection without external trimmers.



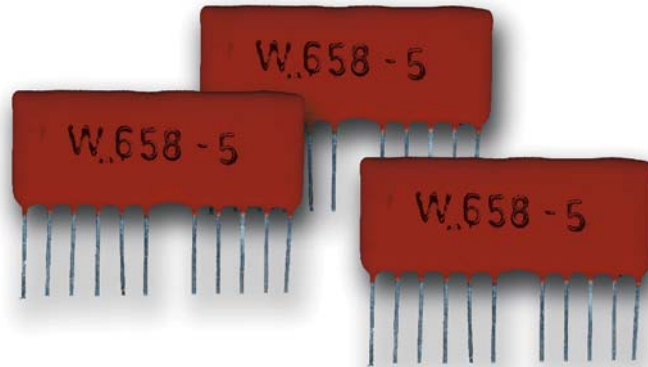
Linear temperature – voltage converter W 658

Application:

- Temperature measurement in regulation and measuring equipment.
- Converts the signal from a nickel sensor Ni 5000 - 10 k Ω to the output voltage 0 - 10 V DC.

Design:

- The converter is made using thin-layer technology on a ceramic pad and fitted with components for surface assembly, the surface finish is formed by silicon rubber, strip outlets, tin-plated, which are not designed for inflexion.
- The converter makes the dependency of the output voltage on temperature linear.
- Two wire sensor connection.
- Design in 5 temperature ranges of measuring and 2 ranges of working temperatures.



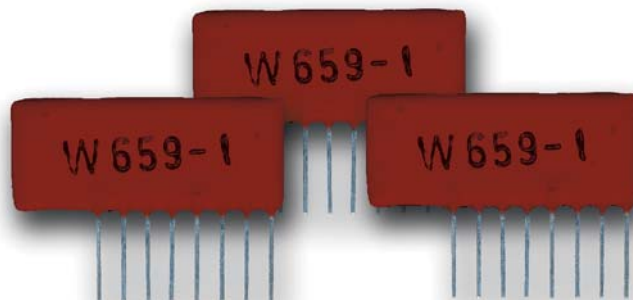
Linear temperature – current converter W 659

Application:

- Temperature measurement in regulation and measuring equipment.
- Converts the signal from a nickel sensor Ni 6180 - 1 k Ω to a unified output signal - current loop 4 - 20 mA.
- Power supply of the converter is connected serially with load in the output loop of the converter.

Design:

- The converter is made using thin-layer technology on a ceramic pad and fitted with components for surface assembly, the surface finish is formed by silicon rubber, strip outlets, tin-plated, which are not designed for inflexion.
- The converter makes the dependency of the output current on temperature linear.
- Two wire sensor connection.
- Design in 10 temperature ranges of measuring.



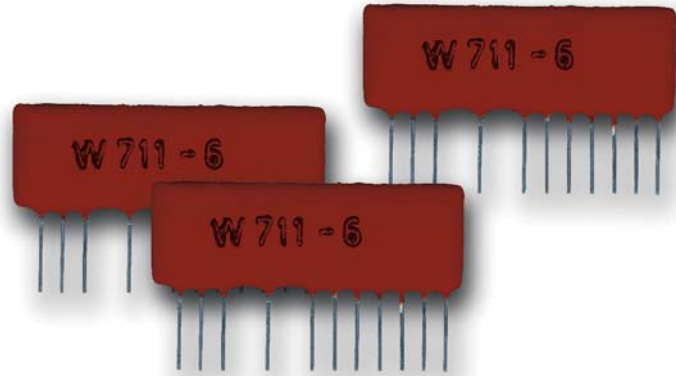
Linear temperature – current converter W 711

Application:

- Temperature measurement in regulation and measuring equipment
- Converts the signal from the platinum sensor Pt 3850 - 100 Ω to a unified output signal - current loop 4 - 20 mA.
- Power supply of the converter is connected serially with load in the output loop of the converter.

Design:

- The converter is made using thin-layer technology on a ceramic pad and fitted with components for surface assembly, the surface finish is formed by silicon rubber, strip outlets, tin-plated, which are not designed for inflexion.
- The converter makes the dependency of the output current on temperature linear.
- Three wire sensor connection.
- Design in 14 temperature ranges of measuring.



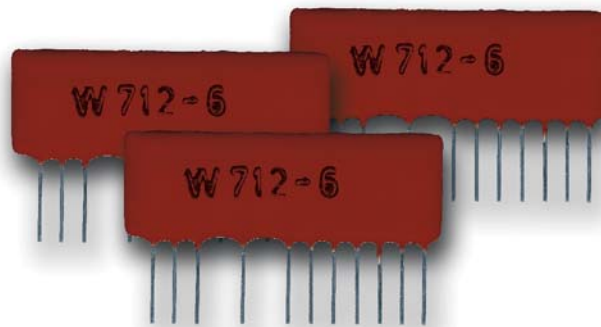
Linear temperature – current converter W 712

Application:

- Temperature measurement in regulation and measuring equipment
- Converts the signal from the platinum sensor Pt 3850 - 1 k Ω to a unified output signal - current loop 4 - 20 mA.
- Power supply of the converter is connected serially with load in the output loop of the converter.

Design:

- The converter is made using thin-layer technology on a ceramic pad and fitted with components for surface assembly, the surface finish is formed by silicon rubber, strip outlets, tin-plated, which are not designed for inflexion.
- The converter makes the dependency of the output current on temperature linear.
- Three wire sensor connection.
- Design in 14 temperature ranges of measuring.



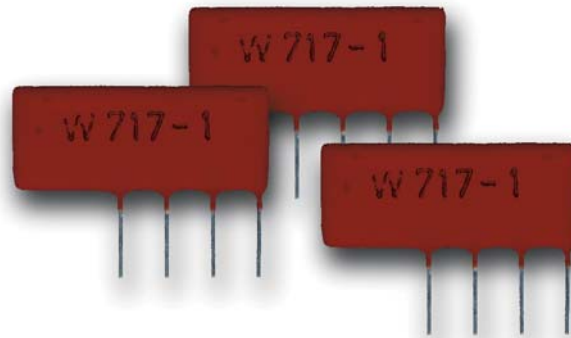
Linear temperature – current converter W 717

Application:

- Temperature measurement in regulation and measuring equipment.
- Converts the signal from a nickel sensor Ni 6180 - 1 k Ω to a unified output signal - current loop 4 - 20 mA.
- Power supply of the converter is connected serially with load in the output loop of the converter.

Design:

- The converter is made using thin-layer technology on a ceramic pad and fitted with components for surface assembly, the surface finish is formed by silicon rubber, strip outlets, tin-plated, which are not designed for inflexion.
- The converter makes the dependency of the output current on temperature linear.
- Two wire sensor connection.
- Design in 10 temperature ranges of measuring.
- The converter is actively set in the production process – circuit wiring without external trimmers.



Offer of custom production and services

PRODUCTION OF COILS, CHOKES AND TRANSFORMERS OF SMALL OUTPUT

- Coiling on rod and toroid ferrite cores
- Coiling on pertinax and plastic skeletons
- Impregnation of coiling with synthetic lacquer
- Assembly of ferrite cores of chokes and transformers
- Assembly of skeleton pins

RESISTANCE MICRO-POINT WELDING

- Connecting of point-weldable materials of diameter 0.08 - 4 mm and thickness 0.05 – 1.5 mm

CASTING WITH PRESSURE DISPENSER

- Casting of parts and components with impregnation and fixing substances (polyurethane, epoxy, silicon...)

OPTICAL ANALYSIS

- Macroscopic and microscopic analysis including documentation using a camera system

SOLDERING

- Manual soldering.
- Soldering in pass oven .
- Tin-plating by submersion in a bath.

CUTTING AT THE DISC DIAMOND SAW

- Cutting substrates: ceramics, glass-ceramics, glass, corundum, ...

FLUIDISATION

- Surface finish of components by baking of a coated epoxy powder.

VACUUM DUSTING

- Vacuum dusting of regular metal layers on various substrate materials.

GILDING

- Electrolytic degreasing small units.

CAPACITOR WINDING

- Capacitor winding with paper dielectric for capacitors and noise-suppressing.
- Capacitor winding from metallizing polypropylene film for capacitors.

METALLIZATION

- Metallizing various materials by zinc or other metals.

harlingen



GPS: 49°54'41.714"N, 16°35'55.947"E

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