

# SEALED, ILLUMINATED ROCKER SWITCHES

**K3**  
SEALED  
ROCKERS

ATTRACTIVE & RUGGED FOR WET & DUSTY ENVIRONMENTS

The OTTO K3 rocker switch is a quality, precision switch designed to comply with standards established for appliance, marine (ignition protection) and off-road vehicles along with other demanding applications where rugged rocker switches are required.

K3 sealed rocker switches snap into industry-standard panel cutouts. Choose illuminated and printed legends, thru-panel drain option and switching compatibility from low level to 20 amps.

The K3 offers a choice of LED, incandescent and neon illumination. Legends can be stamped onto a non-illuminated button, stamped onto an illuminated lens or laser etched into the lens and backlit.

Available in standard and low level contact ratings, the K3 rockers will fit a wide range of applications. Expect a minimum of 25,000 cycles at a full rated load of 20 amps resistive or 15 amps inductive. 100,000 cycles mechanical. A full complement of switch operation is available including momentary and maintained action in 2 or 3-position switches in SPST, SPDT, SPTT, DPST and DPDT circuit arrangements.

OTTO can provide custom colors upon request. Value-added assemblies with wire leads are also available. Please consult the factory for assistance.

## Features:

- **Sealed watertight per IP68S**
- **Snap-in panel mounting into industry standard panel cutout**
- **Optional panel seal gasket**
- **Thru-panel drain option**
- **LED, neon & incandescent lighting**
- **0.250" Quick Connect terminals**
- **Optional one-piece connector**
- **Optional terminal barriers**
- **Low level up to 20 amp switch**
- **Configurable Single Pole Triple Throw (SPTT) with external jumpers**
- **RoHS/WEEE/Reach compliant**



| Standard Characteristics/Ratings: |                                                                                                          |                             |
|-----------------------------------|----------------------------------------------------------------------------------------------------------|-----------------------------|
| ELECTRICAL RATINGS:               |                                                                                                          |                             |
| Load                              | Sea Level<br>@ 12/28VDC                                                                                  | Sea Level<br>@ 125VAC, 60Hz |
| Resistive                         | 20A                                                                                                      | 16A                         |
| Inductive                         | 15A                                                                                                      | 15A                         |
| Lamp                              | 5A                                                                                                       | 5A                          |
| Motor                             | 0.5HP @ 110VAC                                                                                           |                             |
| DWV                               | 1050Vrms except across light terminals                                                                   |                             |
| Low Level                         | 10mA @ 30mV                                                                                              |                             |
| Electrical Life:                  | 25,000 cycles                                                                                            |                             |
| LIGHTING:                         |                                                                                                          |                             |
| Light Source                      | Rating                                                                                                   |                             |
| Incandescent                      | (VDC) 6V, 12V, 24V                                                                                       |                             |
| Neon                              | (VAC) 125V, 250V                                                                                         |                             |
| LED                               | (VDC) 2V, 6V, 12V, 24V                                                                                   |                             |
| Mechanical Life:                  | 100,000 cycles                                                                                           |                             |
| Seal:                             | IP68S                                                                                                    |                             |
| Operating Temp Range:             | -40°C to +85°C                                                                                           |                             |
| MATERIALS:                        |                                                                                                          |                             |
| Case:                             | Thermoplastic, black                                                                                     |                             |
| Button:                           | Thermoplastic                                                                                            |                             |
| Terminals/Contact:                | Brass, silver alloy with silver plate, gold flash for low level                                          |                             |
| Terminal Hardware:                | K3 series recommended Quick Connect terminals:<br>AMP 60253-2 for 12-16 AWG<br>AMP 42100-2 for 14-18 AWG |                             |
| Mounting Hardware:                | None provided                                                                                            |                             |

## K3 SERIES PART NUMBER CODE

Part Number Code Continued Below

**K3**      **X**      **X**

### Base Options

- A.** With Keying Pin Only  
Standard Rating  
Silver Plate
- B.** Without Barriers or Pin  
Standard Rating  
Silver Plate
- C.** With Terminal Barriers Only  
Standard Rating  
Silver Plate
- D.** With Keying Pin Only  
Low Level Rating  
Gold Plate
- E.** Without Barriers or Pin  
Low Level Rating  
Gold Plate
- F.** With Terminal Barriers Only  
Low Level Rating  
Gold Plate
- G.** With Keying Pin Only  
Standard Rating  
No Plate
- H.** Without Barriers or Pin  
Standard Rating  
No Plate
- J.** With Terminal Barriers Only  
Standard Rating  
No Plate

### Case Style/Button Color

- A.** Case With Drain Holes  
Button Color: Black
- B.** Case Without Drain Holes  
Button Color: Black
- C.** Case With Drain Holes  
Button Color: Red
- D.** Case Without Drain Holes  
Button Color: Red
- E.** Case With Drain Holes  
Button Color: White
- F.** Case Without Drain Holes  
Button Color: White

NOTE: Switch case is black for all options below:

- 1. Case With Drain Holes  
Button Not Included
- 2. Case Without Drain Holes  
Button Not Included

### Switch Action/Circuit

|            | Position<br>"A" | Position<br>"B" | Position<br>"C" | Circuit |
|------------|-----------------|-----------------|-----------------|---------|
| <b>1A.</b> | 3-4             | NONE            | OFF             | SPST    |
| <b>2A.</b> | 3-4/8-9         | NONE            | OFF             | DPST    |
| <b>1B.</b> | 3-4             | NONE            | 3-2             | SPDT    |
| <b>2B.</b> | 3-4/8-9         | NONE            | 3-2/8-7         | DPDT    |
| <b>1C.</b> | (3-4)           | NONE            | OFF             | SPST    |
| <b>2C.</b> | (3-4)/(8-9)     | NONE            | OFF             | DPST    |
| <b>1D.</b> | (3-4)           | NONE            | 3-2             | SPDT    |
| <b>2D.</b> | (3-4)/(8-9)     | NONE            | 3-2/8-7         | DPDT    |
| <b>1E.</b> | (3-4)           | OFF             | (3-2)           | SPDT    |
| <b>2E.</b> | (3-4)/(8-9)     | OFF             | (3-2)/(8-7)     | DPDT    |
| <b>1F.</b> | 3-4             | OFF             | 3-2             | SPDT    |
| <b>2F.</b> | 3-4/8-9         | OFF             | 3-2/8-7         | DPDT    |
| <b>1G.</b> | (3-4)           | OFF             | 3-2             | SPDT    |
| <b>2G.</b> | (3-4)/(8-9)     | OFF             | 3-2/8-7         | DPDT    |

### Special Circuits

|            | Position<br>"A" | Position<br>"B" | Position<br>"C" | Special<br>Circuits |
|------------|-----------------|-----------------|-----------------|---------------------|
| <b>1H.</b> | 3-4/8-9         | 8-9             | OFF             | ON/ON/OFF           |
| <b>1J.</b> | 3-4/8-9         | 8-9             | NONE            | ON/ON/NONE          |
| <b>1K.</b> | (3-4)/(8-9)     | 8-9             | OFF             | (ON)/ON/OFF         |
| <b>1L.</b> | (3-4)/(8-9)     | 8-9             | NONE            | (ON)/ON/NONE        |
| <b>1M.</b> | 3-4/8-9         | 3-2/8-9         | 3-2/8-7         | ON/ON/ON            |
| <b>1N.</b> | (3-4)/(8-9)     | 3-2/8-9         | 3-2/8-7         | (ON)/ON/ON          |
| <b>1P.</b> | (3-4)/(8-9)     | 3-2/8-9         | (3-2)/(8-7)     | (ON)/ON/(ON)        |
| <b>2R.</b> | 3-4/8-9         | OFF/8-9         | OFF/OFF         | ON/OFF/OFF          |
| <b>2S.</b> | (3-4)/8-9       | OFF/8-9         | OFF/OFF         | (ON)/OFF/OFF        |

NOTE: ( ) denotes momentary action.

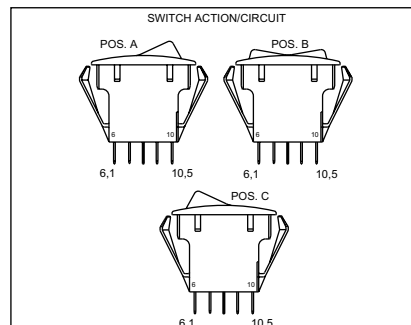
### Light Source Type

- A.** No Illumination
- B.** 6V Incandescent
- C.** 12V Incandescent
- D.** 24V Incandescent
- E.** 125VAC Neon
- F.** 250VAC Neon
- G.** 2V Red LED
- H.** 2V Green LED
- J.** 2V Amber LED
- K.** 6V Red LED
- L.** 6V Green LED
- M.** 6V Amber LED
- N.** 12V Red LED
- P.** 12V Green LED
- Q.** 12V Amber LED
- R.** 24V Red LED
- S.** 24V Green LED
- T.** 24V Amber LED

### Light Circuit

| Circuit               | Terminal<br>Connections |
|-----------------------|-------------------------|
| <b>A.</b> None        | None                    |
| <b>B.</b> Dep. in "A" | 1(-) & 4(+)             |
| <b>C.</b> Dep. in "C" | 2(+) & 5(-)             |
| <b>D.</b> Ind. in "A" | 1(-) & 6(+)             |
| <b>E.</b> Ind. in "C" | 5(-) & 10(+)            |
| <b>F.</b> Dep. in "A" | 1(-) & 4(+)             |
| <b>J.</b> Dep. in "C" | 2(+) & 5(-)             |
| <b>G.</b> Dep. in "A" | 1(-) & 4(+)             |
| <b>L.</b> Ind. in "C" | 5(-) & 10(+)            |
| <b>H.</b> Ind. in "A" | 1(-) & 6(+)             |
| <b>N.</b> Dep. in "C" | 2(+) & 5(-)             |
| <b>J.</b> Ind. in "A" | 1(-) & 6(+)             |
| <b>Q.</b> Ind. in "C" | 5(-) & 10(+)            |

NOTE: Polarity only applies to LED circuits.



## K3 PART NUMBER CODE - CONTINUED FROM ABOVE

**X**

### Lens Color

- Position "A"**
- 1. Transparent Red
- 2. Transparent Green
- 3. Transparent Amber ①
- 4. Clear ①
- 5. Translucent White ②
- Z. No Lens ③

NOTE: It is not recommended to use green LEDs with translucent white lenses. This will reduce light intensity. Use clear lenses with green LEDs for maximum light intensity.

- ① Recommended for neon lamps.
- ② Special Order: Ultra bright green LED to be used with translucent white lenses.
- ③ Legend colors "B" & "D" are only available on lens color "Z".

**STOP HERE** for  
lighted switches  
without legends.

Example: K3AAIFNH-44

### Legend Style

- Position "A"**
- ZZ. No Legend

- Position "C"**
- ZZ. No Legend

### Legend Color

- Position "A"**
- 1. Red
- 2. Black
- 9. White
- B. Backlight/  
Daylight White ④
- D. Backlight/  
Deadfront ④
- Z. No Legend

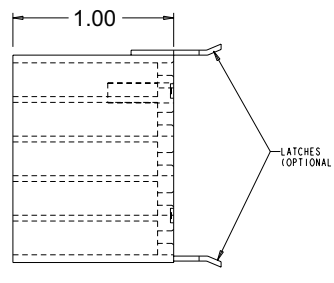
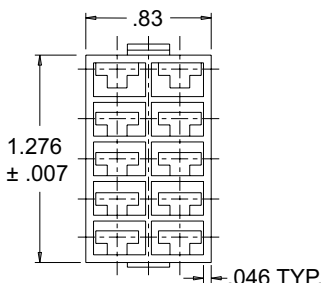
④ For legend color "B" and "D", please use button color "A" & "B" and lens color "Z" for each position.

### Legend Orientation

- Position "A"**
- Position "C"**
- 1. Std.
- 2. 90°
- 3. 180°
- 4. 270°

**STOP HERE** for  
unlighted switches  
without legends.

Example: K3AAIFAA



**K3 Connector**  
P/N 801775-2A Without Latches  
P/N 801775-2B With Latches

**Panel Seal Gasket**  
P/N 807037

Order separately for use with switches with-  
out drain holes.

**Panel Plug**  
See Panel Plug (PP) page 160.

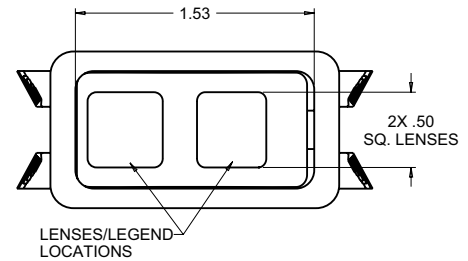
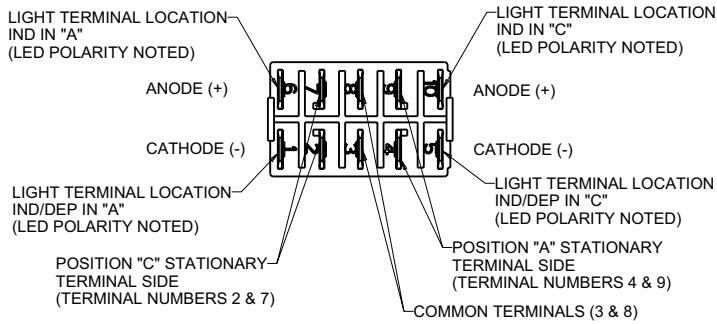
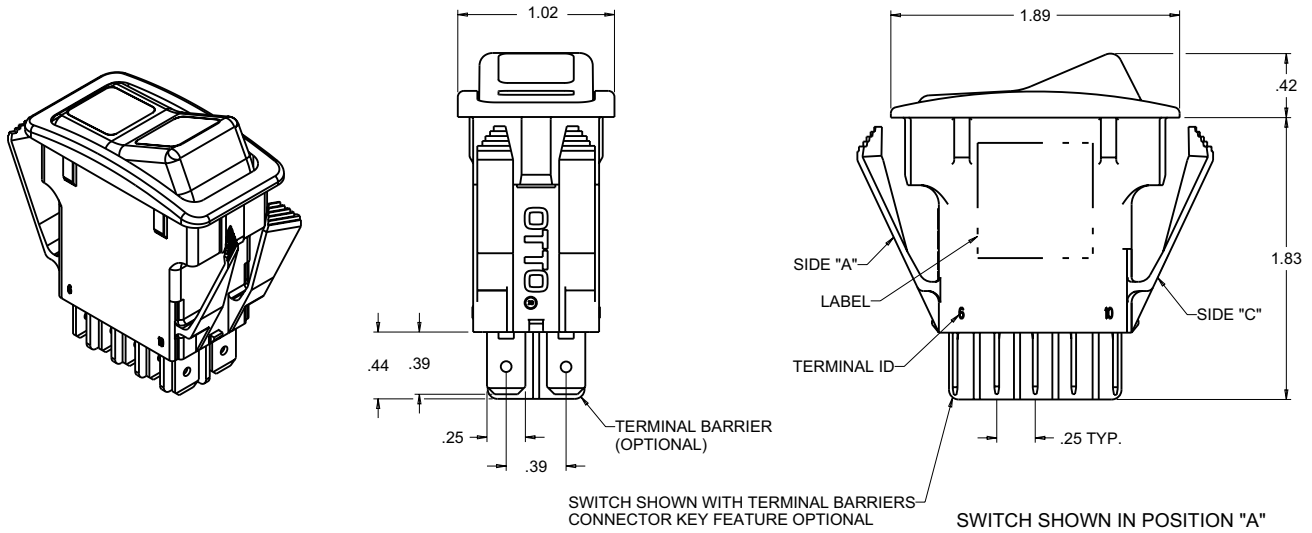
• K3 panel plugs available as shown on page 160.

Recommended Quick Connect Terminals:  
AMP 60253-2 for 12-16 AWG  
AMP 42100-2 for 14-18 AWG

# SEALED, ILLUMINATED ROCKER SWITCHES

**K3**  
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SNAP-IN PANEL MOUNTING, ATTRACTIVE & RUGGED FOR WET & DUSTY ENVIRONMENTS



|                                                                                                                                                                                                                                                                                                                       |  |                                                                                   |  |                                                                                              |  |                                                                                                                 |  |                                                                                                                 |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------|--|
| <p><b>K3...1M...</b></p> <p>POS "A"      POS "B"      POS "C"</p> <p>SPECIAL CIRCUIT - ON-ON-ON SCHEMATIC</p>                                                                                                                                                                                                         |  | <p><b>K3...2A...</b></p> <p>DPST-ON-NONE-OFF SCHEMATIC</p>                        |  | <p><b>K3...2B...</b></p> <p>DPDT-ON-NONE-ON SCHEMATIC</p>                                    |  | <p><b>K3...2C...</b></p> <p>DPST-(ON)-NONE-OFF SCHEMATIC</p>                                                    |  | <p><b>K3...2D...</b></p> <p>DPDT-(ON)-NONE-ON SCHEMATIC</p>                                                     |  |
| <p><b>GENERAL SCHEMATIC INFORMATION</b></p> <p>○ INDICATES MAINTAIN ACTION (FIXED POSITION)</p> <p>▼ INDICATES MOMENTARY ACTION (AUTOMATIC RETURN POSITION)</p> <p><b>FOR OTHER LIGHTING SCHEMATICS REPLACE FOLLOWING SYMBOLS:</b></p> <p>⬤ INCANDESCENT (REPLACE RESISTOR &amp; LED)</p> <p>⬤ NEON (REPLACE LED)</p> |  | <p><b>K3...2E...</b></p> <p>DPDT-(ON)-OFF-(ON) SCHEMATIC</p>                      |  | <p><b>K3...2F...</b></p> <p>DPDT-ON-OFF-ON SCHEMATIC</p>                                     |  | <p><b>K3...2G...</b></p> <p>DPDT-(ON)-OFF-ON SCHEMATIC</p>                                                      |  | <p><b>K3...2BNC-Z</b></p> <p>DPDT-ON-NONE-ON SCHEMATIC W/DEPENDENT LED IN "A"</p>                               |  |
| <p><b>K3...2BNC-Z</b></p> <p>DPDT-ON-NONE-ON SCHEMATIC W/DEPENDENT LED IN "A"</p>                                                                                                                                                                                                                                     |  | <p><b>K3...2BNE-Z</b></p> <p>DPDT-ON-NONE-ON SCHEMATIC W/DEPENDENT LED IN "C"</p> |  | <p><b>K3...2BNF...</b></p> <p>DPDT-ON-NONE-ON SCHEMATIC W/DEPENDENT LED IN "A" &amp; "C"</p> |  | <p><b>K3...2BNG...</b></p> <p>DPDT-ON-NONE-ON SCHEMATIC W/DEPENDENT LED IN "A" &amp; INDEPENDENT LED IN "C"</p> |  | <p><b>K3...2BNH...</b></p> <p>DPDT-ON-NONE-ON SCHEMATIC W/INDEPENDENT LED IN "A" &amp; DEPENDENT LED IN "C"</p> |  |
| <p><b>K3...2BNJ...</b></p> <p>DPDT-ON-NONE-ON SCHEMATIC W/INDEPENDENT LED IN "A" &amp; "C"</p>                                                                                                                                                                                                                        |  |                                                                                   |  |                                                                                              |  |                                                                                                                 |  |                                                                                                                 |  |

## SNAP-IN PANEL MOUNTING

## Standard Legends Per SAE Specifications

| STANDARD LEGENDS PER SAE SPECIFICATIONS |                                                                                       |                         |    |                                                                                       |                                  |
|-----------------------------------------|---------------------------------------------------------------------------------------|-------------------------|----|---------------------------------------------------------------------------------------|----------------------------------|
| A1                                      |      | ANCHOR                  | K2 |      | UNLOCK                           |
| B1                                      |      | BATTERY                 | L1 |      | LIGHT                            |
| B2                                      |      | ELECTRIC POWER          | L2 |      | MASTER LIGHTING SWITCH           |
| C1                                      |      | AC/COOLING SYSTEMS      | L3 |      | HEADLIGHTS                       |
| C2                                      |      | DEHUMIDIFIER            | L4 |      | HEADLIGHTS-LOW /<br>DIPPED BEAM  |
| C3                                      |      | HEATER/INTERIOR HEATING | L5 |      | HEADLIGHTS-HIGH /<br>UPPER BEAM  |
| D1                                      |      | WINDSHIELD DEFROSTER    | L6 |      | PARKING LIGHT                    |
| D2                                      |      | REAR WINDOW DEFROSTER   | L7 |      | WORK LAMP                        |
| D3                                      |      | MIRROR DEFROSTER        | L8 |      | WORK LAMP                        |
| E1                                      |      | ENGINE/START            | L9 |      | INTERIOR DOME LIGHT              |
| E2                                      |     | ENGINE/STOP             | M1 |     | BEACON                           |
| E3                                      |    | ON/START                | M2 |    | HAZARD/POSITION LIGHTS           |
| E4                                      |    | OFF/STOP                | M3 |    | CLEARANCE LIGHTS                 |
| E5                                      | ON                                                                                    | ON                      | M4 |    | SIDE MARKER LIGHT                |
| E6                                      | OFF                                                                                   | OFF                     | M5 |    | RUNNING LIGHTS<br>(UNDER POWER)  |
| E7                                      |    | ENGINE ELECTRIC PREHEAT | M6 |    | ANCHOR LIGHT                     |
| E8                                      |    | ENGINE-GAS INJECTION    | M7 |    | RUNNING/ANCHOR LIGHTS            |
| F1                                      |    | FRONT FOG LIGHTS        | M8 |    | SEARCH LIGHT                     |
| F2                                      |    | REAR FOG LIGHTS         | M9 |    | LEFT TURN SIGNAL                 |
| G1                                      |    | FUEL                    | MA |    | RIGHT TURN SIGNAL                |
| H1                                      |    | HORN                    | P1 |    | BILGE PUMP #1                    |
| H2                                      |    | HORN REAR               | P2 |    | BILGE PUMP #2                    |
| K1                                      |    | LOCK                    | P3 |    | BILGE PUMP #3                    |
|                                         |                                                                                       |                         | P4 |    | BILGE PUMP                       |
| P5                                      |    | BILGE BLOWER            | R1 |    | LIFT                             |
| R2                                      |    | LOWER                   | R3 |    | UP                               |
| R4                                      |    | DOWN                    | R5 |    | RIGHT                            |
| R6                                      |    | LEFT                    | R7 | FWD                                                                                   | FORWARD                          |
| R8                                      | REV                                                                                   | REVERSE                 | S1 |    | RADIO                            |
| S2                                      |   | MUTE                    | T1 |  | FAST                             |
| T2                                      |  | SLOW                    | T3 |  | TRIM TAB /<br>TRIMMING OPERATION |
| T4                                      |  | TRANSMISSION            | V1 |  | VENTILATING / AC FAN             |
| W1                                      |  | WINDSHIELD WIPER        | W2 |  | WINDSHIELD-WASHER                |
| W3                                      |  | WINDSHIELD-WASHER/WIPER | W4 |  | REAR WINDOW WIPER                |
| W5                                      |  | REAR WINDOW-WASHER      | W6 |  | REAR WINDOW-WASHER/WIPER         |
| ZZ                                      |                                                                                       | NO LEGEND               |    |                                                                                       |                                  |

For legends not shown, please consult an OTTO representative.



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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