

# 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                                                                                            |                             |

# SEALED, ILLUMINATED ROCKER SWITCHES

## 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

**XX** **X**

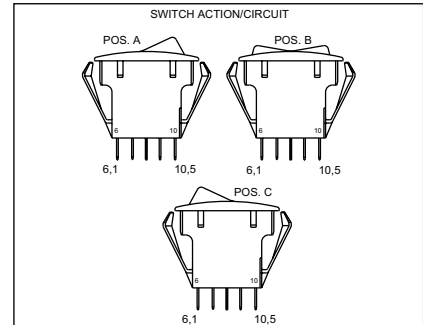
**Switch Action/Circuit**

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

- X** **X**
- 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 Connections |
|----------------|----------------------|
| A. None        | None                 |
| B. Dep. in "A" | 1(-) & 4(+)          |
| C. Dep. in "C" | 2(+) & 5(-)          |
| D. Ind. in "A" | 1(-) & 6(+)          |
| E. Ind. in "C" | 5(-) & 10(+)         |
| F. Dep. in "A" | 1(-) & 4(+)          |
| J. Dep. in "C" | 2(+) & 5(-)          |
| G. Dep. in "A" | 1(-) & 4(+)          |
| L. Ind. in "C" | 5(-) & 10(+)         |
| H. Ind. in "A" | 1(-) & 6(+)          |
| N. Dep. in "C" | 2(+) & 5(-)          |
| J. Ind. in "A" | 1(-) & 6(+)          |
| Q. Ind. in "C" | 5(-) & 10(+)         |
- NOTE: Polarity only applies to LED circuits.

**Special Circuits**

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



NOTE: ( ) denotes momentary action.

## K3 PART NUMBER CODE - CONTINUED FROM ABOVE

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

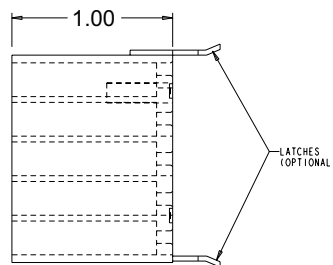
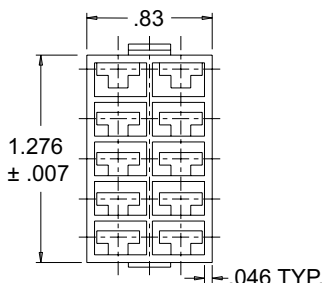
- XX** **XX**
- Legend Style**
- | Position "A"  | Position "C"  |
|---------------|---------------|
| ZZ. No Legend | ZZ. No Legend |
- NOTE: For all other legend options, refer to the legend table, find the two digit code and enter the code in the appropriate position(s).

- X** **X**
- Legend Color**
- | Position "A"                  | Position "C"                  |
|-------------------------------|-------------------------------|
| 1. Red                        | 1. Red                        |
| 2. Black                      | 2. Black                      |
| 9. White                      | 9. White                      |
| B. Backlight/Daylight White ④ | B. Backlight/Daylight White ④ |
| D. Backlight/Deadfront ④      | D. Backlight/Deadfront ④      |
| Z. No Legend                  | Z. No Legend                  |
- ④ For legend color "B" and "D", please use button color "A" & "B" and lens color "Z" for each position.

- X**
- Legend Orientation**
- |         | Position "A" | Position "C" |
|---------|--------------|--------------|
| 1. Std. | A            | C            |
| 2. 90°  | ⤵            | ⤴            |
| 3. 180° | ⤵            | ⤴            |
| 4. 270° | ⤵            | ⤴            |

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

Example: K3AAIFNH-44



**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 without drain holes.

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

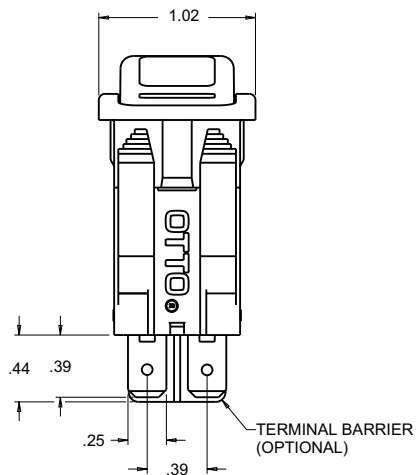
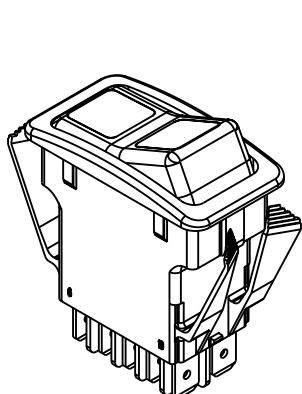
• K3 panel plugs available as shown on page 160.

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

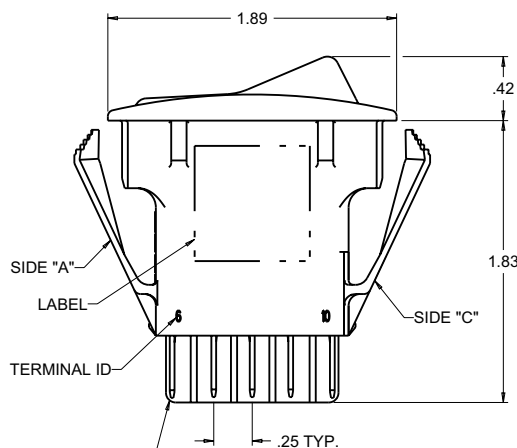
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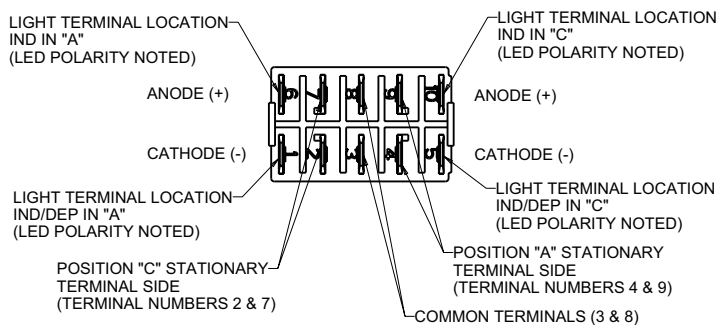
SNAP-IN PANEL MOUNTING, ATTRACTIVE & RUGGED FOR WET & DUSTY ENVIRONMENTS



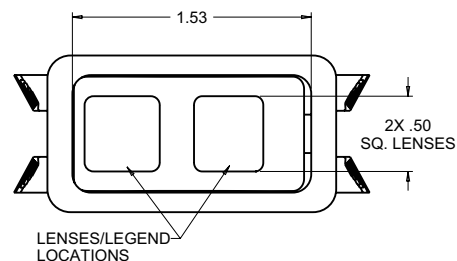
SWITCH SHOWN WITH TERMINAL BARRIERS  
CONNECTOR KEY FEATURE OPTIONAL



SWITCH SHOWN IN POSITION "A"



TERMINAL LOCATIONS AS VIEWED FROM  
BOTTOM OF SWITCH (CASE REMOVED FOR CLARITY)  
CONTACT MADE IN OPPOSITE DIRECTION OF ROCKER TRAVEL



LENSES/LEGEND  
LOCATIONS

|                                                                                                                                                                                                                                                                                                                     |                                                                                        |                                                                                        |                                                                                                         |                                                                                                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| <p>K3..1M...</p> <p>SPECIAL CIRCUIT - ON-ON-ON SCHEMATIC</p>                                                                                                                                                                                                                                                        | <p>K3..2A...</p> <p>DPST-ON-NONE-OFF SCHEMATIC</p>                                     | <p>K3..2B...</p> <p>DPDT-ON-NONE-ON SCHEMATIC</p>                                      | <p>K3..2C...</p> <p>DPST-(ON)-NONE-OFF SCHEMATIC</p>                                                    | <p>K3..2D...</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>K3..2E...</p> <p>DPDT-(ON)-OFF-(ON) SCHEMATIC</p>                                   | <p>K3..2F...</p> <p>DPDT-ON-OFF-ON SCHEMATIC</p>                                       | <p>K3..2G...</p> <p>DPDT-(ON)-OFF-ON SCHEMATIC</p>                                                      | <p>K3..2BNC-Z</p> <p>DPDT-ON-NONE-ON SCHEMATIC W/DEPENDENT LED IN "A"</p>                               |
| <p>K3..2BNC-Z</p> <p>DPDT-ON-NONE-ON SCHEMATIC W/DEPENDENT LED IN "A"</p>                                                                                                                                                                                                                                           | <p>K3..2BNE-Z</p> <p>DPDT-ON-NONE-ON SCHEMATIC W/DEPENDENT LED IN "C"</p>              | <p>K3..2BNF...</p> <p>DPDT-ON-NONE-ON SCHEMATIC W/DEPENDENT LED IN "A" &amp; "C"</p>   | <p>K3..2BNG...</p> <p>DPDT-ON-NONE-ON SCHEMATIC W/DEPENDENT LED IN "A" &amp; INDEPENDENT LED IN "C"</p> | <p>K3..2BNH...</p> <p>DPDT-ON-NONE-ON SCHEMATIC W/INDEPENDENT LED IN "A" &amp; DEPENDENT LED IN "C"</p> |
| <p>K3..2BNJ...</p> <p>DPDT-ON-NONE-ON SCHEMATIC W/INDEPENDENT LED IN "A" &amp; "C"</p>                                                                                                                                                                                                                              | <p>K3..2BNK...</p> <p>DPDT-ON-NONE-ON SCHEMATIC W/INDEPENDENT LED IN "A" &amp; "C"</p> | <p>K3..2BNL...</p> <p>DPDT-ON-NONE-ON SCHEMATIC W/INDEPENDENT LED IN "A" &amp; "C"</p> | <p>K3..2BNM...</p> <p>DPDT-ON-NONE-ON SCHEMATIC W/INDEPENDENT LED IN "A" &amp; "C"</p>                  | <p>K3..2BNO...</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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**Факс:** 8 (812) 320-02-42

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**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.