The single, double and triple pole 641-Series represents the most compact offerings of the Carling's pushbutton switch line. These switches are UL approved and meet ENEC spacing requirements. Additionally, the new 3-pole switch affords the versatility to control an extra function or indicator light. Rugged metal construction, self-cleaning contacts and stiff actuation force (3-3 1/2 lbs. typical) have made these switches ideal for most “foot pedal” type applications. These alternate action switches fit a standard .500” mounting hole with options of solder lug, wire lead and PC terminals.

Product Highlights:
• Available in 1-3 poles
• 3+ lbs. actuation force ideal for Foot pedal applications
• Solder Lug, Wire Lead or PC Terminal options
• Self-cleaning wiping style contacts

Typical Applications:
• Music Equipment
• Test & Measurement Devices
• Audio-Visual Equipment
• Appliances

Resources:
Download 3D CAD Files
IGS ▶ STP ▶
# 641-Series - Pushbutton Switches - General Specifications

## Electrical
- **Rating**: 5A 125VAC, 2A 250VAC
- **Dielectric Strength**: 1500V RMS
- **Insulation Resistance**: 50 Megohms
- **Initial Contact Resistance**: 10 Milli Ohm max @ 4Vdc
- **Electrical Life**: 50,000 Cycles
- **Terminals**: Solder Lug, Wire Leads and PC

## Environmental
- **Vibration Sinusoidal**: Mil STD 202G, Method 204D, Test Condition A 0.06DA or 10G’s 10-500Hz
- **Shock**: MIL-STD 2020G, Method 213B Test Condition K, 30G’s
- **Handling Shock**: 1 Meter Drop onto Hard Surface, all surfaces and planes
- **Thermal Shock**: MIL-STD 2020G, Method 107G Test Condition A -55 C to 85 C
- **Moisture Resistance**: MIL-STD 2020G, Method 106F 10 25 C to 65 C Cycles 95% RH
- **Thermal Cycling**: 25 Cycles -40 C to 85 C
- **Operating Temperature**: 32°F to 185°F (0°C to +85°C)

## Physical
- **Function Circuits**: Three Pole Single Throw, TPST
- **Operation**: Three Pole Double Throw, TPDT
- **Button Travel**: 0.19 (4.83mm)
- **Actuation Force**: 3 to 5 LB, 1360 to 2268 g
- **Base**: Polyester, PBT Glass Filled
- **Button**: Brass, Nickel Plated
- **Bushing**: Brass, Nickel Plated
- **Plunger**: Brass, Nickel Plated
- **Top Plate**: Stainless Steel
- **Actuator (Internal)**: Nylon 6/6
- **Pin (Internal)**: Nylon 6/6
- **Driver**: Cold Rolled Steel
- **Springs**: Music Wire
- **Movable Contact**: Copper
- **Terminals**: Brass (tin plated)
- **Mounting**: ½” Dia. Hole, with and without keyway, or with locking ring

## Safety & Regulation
- **Agency**: UL 61058, EN 61058 (3 Pole Version)  
  UL 1054 (1 & 2 Pole Version)
- **Materials**: RoHS, REACH

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*Manufacturer reserves the right to change product specification without prior notice.*
64111210

1 PART NUMBER: SERIES / POLES / CIRCUITRY / RATING / TERMINATION

<table>
<thead>
<tr>
<th>One Pole</th>
<th>Two Pole</th>
<th>Three Pole</th>
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<tbody>
<tr>
<td>2A 250VAC, SA 125VAC</td>
<td>ON-OFF</td>
<td>ON-OFF</td>
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<tr>
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<td>PC term.</td>
<td>wire leads.</td>
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</tbody>
</table>

Notes:
1. For 1 and 2 pole only. 3 Pole switches use brass Pin

1 OR 2 POLE SHOWN WITH SOLDER LUG

3 POLE SHOWN WITH SOLDER LUG

3 POLE SHOWN WITH PC TERMINAL

NOTES:
1. KEYWAY TOWARD T1 AND 6 FOR ONE AND TWO POLE SWITCHES
2. KEYWAY TOWARD T4 FOR THREE POLE SWITCHES

1 AND 2 POLE PC TERMINAL MOUNTING HOLES

3 POLE PC TERMINAL

1.076
.094
.080
1.121
.718
.080
typ
.062[1.57] typ
.345[8.76]
.270[6.86]
.062[1.57]
.270[6.86]
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About Carling

Founded in 1920, Carling Technologies is a leading manufacturer of electrical and electronic switches and assemblies, circuit breakers, electronic controls, power distribution units, and multiplexed power distribution systems. With four ISO9001 and IATF16949 registered manufacturing facilities and technical sales offices worldwide, Carling Technologies Sales, Service and Engineering teams do much more than manufacture electrical components, they engineer powerful solutions! To learn more about Carling please visit www.carlingtech.com/company-profile.

To view all of Carling’s environmental, quality, health & safety certifications please visit www.carlingtech.com/environmental-certifications
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