



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# IC series

Pushbutton switches for harsh environments •  
short case • bushing Ø 12 mm • momentary



## DISTINCTIVE FEATURES

Momentary with short case, reduced behind-panel depth

Tactile feedback

Flat round actuator for optional marking

Glossy actuator option (round curved only)

Sealed to IP67



## ENVIRONMENTAL SPECIFICATIONS

- Front panel sealing : IP67 according to IEC 60529
- Shock resistance : 100 g according to IEC 512-4, test 6c
- Vibration resistance : 10-500Hz - 10 g according to IEC 512-4, test 6d
- Salt spray : IEC 512-6, test 11f
- Robustness : IK06 according to EN 50102 (1 joule)
- Operating temperature : -40 °C to +85 °C (-40 °F to +185 °F)



## ELECTRICAL SPECIFICATIONS

- Max. current/voltage rating with resistive load :  
5 A 28 VDC, 70,000 cycles  
0.2 A 48 VDC, 500,000 cycles  
0.5 A 48 VAC, 500,000 cycles
- Initial contact resistance : 50 mΩ max.
- Insulation resistance : 1 GΩ min. at 500 VDC
- Dielectric strength : 1,500 Vrms 50 HZ between terminals



## GENERAL SPECIFICATIONS

- Panel thickness : 1.5 mm (.059) min. - 4 mm (.157 max.)
- Total travel : 1.7 mm (.067) ± 0.3 mm
- Typical operating force : 4 N ± 2 N
- Low level or mechanical life : 1,000,000 cycles
- Torque : 1,5 Nm max. applied to nut
- Soldering : 320 °C (608 °F) max. for 3 sec.

The company reserves the right to change specifications without notice.



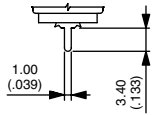
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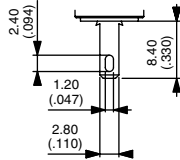
## MATERIALS

- Case : thermoplastic UL94-V0
- Actuator : polyamide 6/6
- Bushing/bezel : zinc die-cast (zamac), black painted
- Contacts : silver, gold plated
- Multi-wire leads AWG20, section 0.6 mm<sup>2</sup>
- Terminal seal : epoxy

## TERMINALS

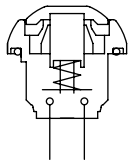


Straight P



Quick-connect Z1

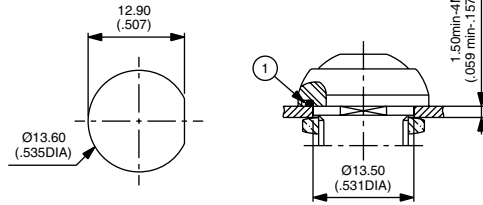
## ELECTRICAL FUNCTIONS



Function 3 (NO)

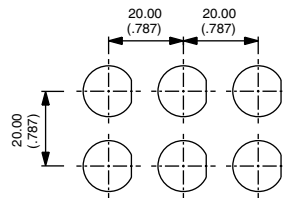
## MOUNTING

### PANEL CUT-OUT

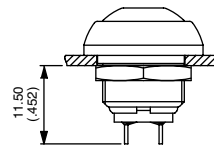


① - O-ring

### MATRIX MOUNTING



### BACK OF PANEL SPACE REQUIREMENT

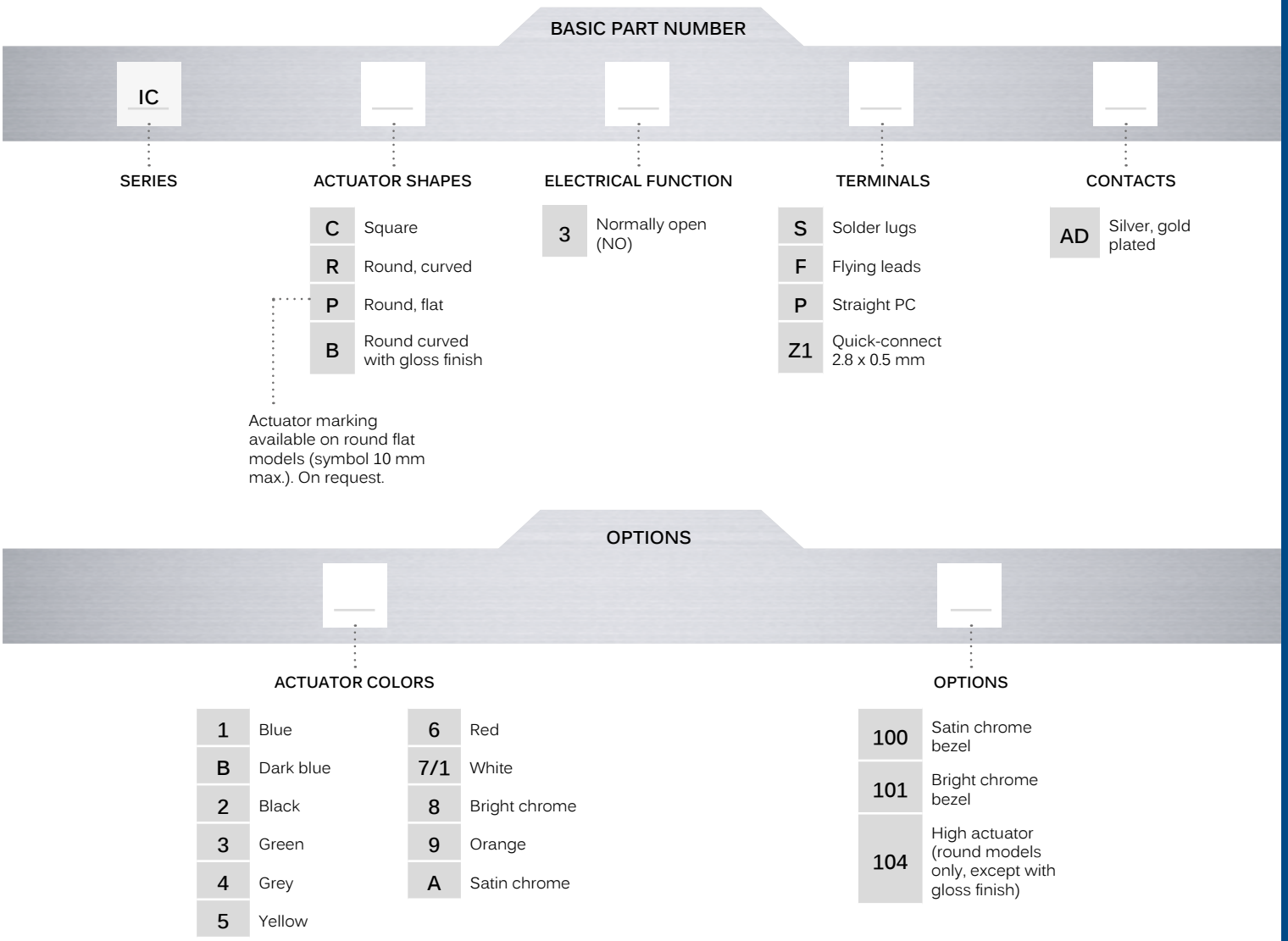


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## BUILD YOUR PART NUMBER



## ABOUT THIS SERIES

On the following pages, you will find successively basic part numbers of switches and options in the same order as in above chart.

- Notice** : please note that not all combinations of above numbers are available. Refer to the following pages for further information.
- A sealing boot** is available to protect the switches against frost and sand (P/N U5125). See "Sealing Boots" section of website.
- Mounting accessories** : Standard hardware supplied : 1 hex nut 14 mm (.551) across flats and 1 O-Ring. Hex nut part number U166.

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## SQUARE - SOLDER LUG TERMINALS




**ICC3SAD**  Normally Open

Also available with straight PC terminals : ICC3PAD  
and quick-connect terminals : ICC3Z1AD


## SQUARE - FLYING LEAD TERMINALS



**ICC3FAD**  Normally Open

## ROUND - SOLDER LUG TERMINALS




Curved actuator  
**ICR3SAD**  Normally Open


Flat actuator  
**ICP3SAD**  Normally Open

Also available with straight PC terminals : IC•3PAD  
and quick-connect terminals : IC•3Z1AD

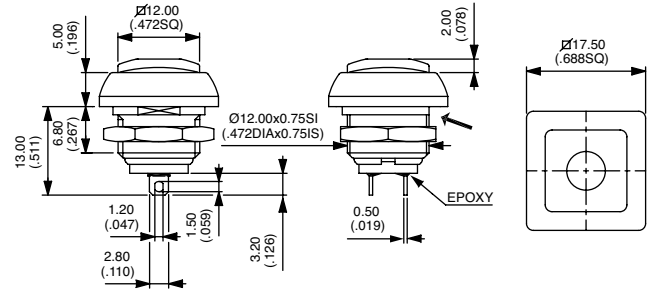
## ROUND - FLYING LEAD TERMINALS



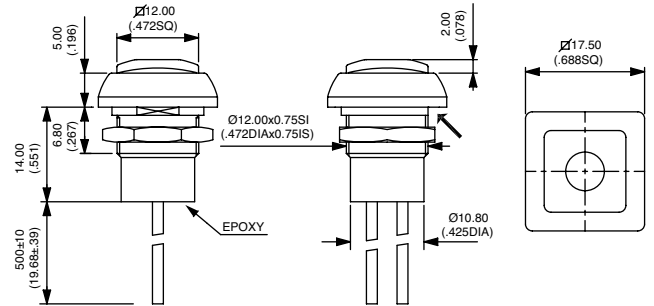
Curved actuator  
**ICR3FAD**  Normally Open

Flat actuator  
**ICP3FAD**  Normally Open

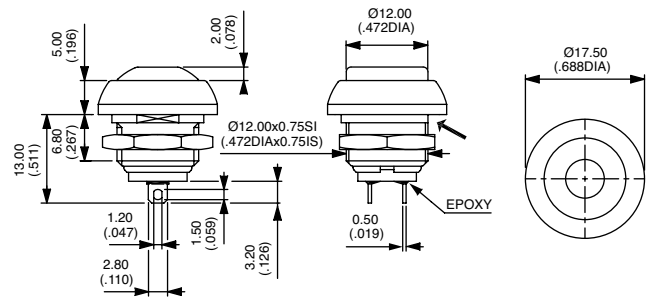
→ FLAT



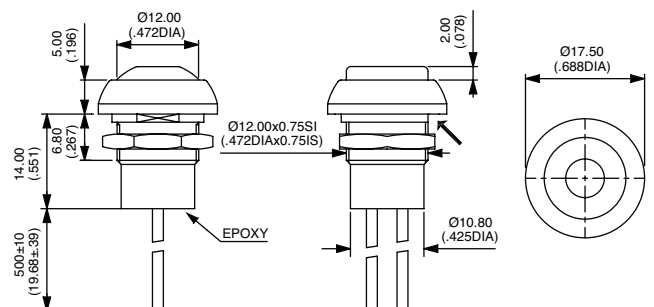
→ FLAT



→ FLAT



→ FLAT



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## ACTUATOR COLORS

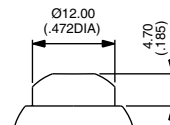


- 1 Blue
- B Dark blue
- 2 Black
- 3 Green
- 4 Grey
- 5 Yellow
- 6 Red
- 7/1 White
- 8 Bright chrome
- 9 Orange
- A Satin chrome

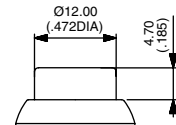
## OPTIONS



- 100 Satin chrome bezel
- 101 Bright chrome bezel
- 104 High actuator (round models only, except with gloss finish)



104 IPR



104 IPP