

## O/E/N AM

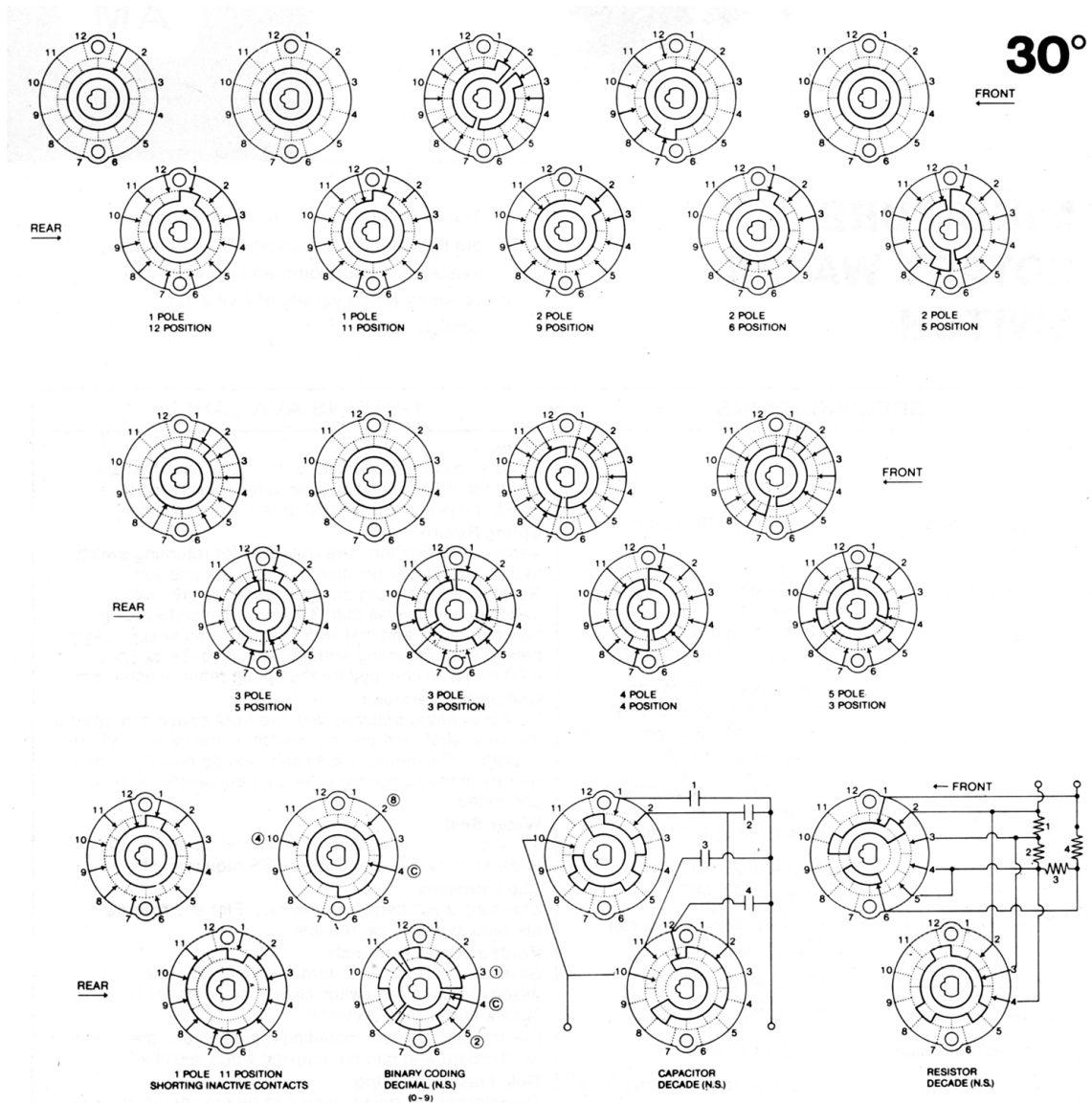
### MINIATURE ROTARY WAFER SWITCH

- Compact, Flexible Switch Package
- Available in Commercial & Military Version
- Variety of Switching configurations
- Optional water sealing
- Resistor & capacitor decade options
- Optional BCD outputs
- Dropping Circuits

SPECIFICATIONS	OPTIONS AVAILABLE
<p>Angle of throws available : 30°, 36°, 45°, 60°, &amp; 90°</p> <p>Contact rating : Silver plated brass contacts can switch 0.5 Amp load (resistive) at 28VDC and 0.25 Amps (resistive) at 110 VAC.</p> <p>Silver alloy contacts can switch 1 Amp (resistive) at 28 VDC and 0.5 Amps (resistive) at 110 VAC.</p> <p>Contact rating requirements on resistive loads as per SRW02 of JSS5 1207</p> <p>200mA at 28 VDC 50mA at 230 VAC</p> <p>Contact resistance : 3 to 15 milliohms between adjacent contacts.</p> <p>Insulation resistance : 1,000 Megohms Min.</p> <p>Dielectric strength : 750 VAC at sea level</p> <p>Temperature range : -65° C to +85° C</p> <p>Finishes : All component parts requiring plating are cadmium, nickel or zinc plated and passivated as per our standards.</p>	<p><b>Stops</b> Fixed stops at total number of positions specified are standard. If OFF position is required, please indicate whether it is to be at the first or last switch position.</p> <p><b>Spring Return</b> Various combinations are available for returning switch to the last-but-one position from the last position. Reliable spring return action is possible only with switches having less than 3 wafers. The first spacing between index and first wafer (and overall switch length behind front mounting surface) will increase by about 6.00 mm to accommodate the spring return mechanism.</p> <p><b>Water Seal</b> 'O' ring sealing is available for both shaft and index housing. Water sealing meets JSS requirements.</p> <p><b>Clip Terminals</b> Standard is 60 bend on terminals. Flat and reverse clips are also available on request.</p> <p><b>Printed circuit Terminals</b> Silver plated Brass PC. terminals are available assembled with the switch clips (See figure for terminal details and drilling pattern). Electrostatic shields, mounting brackets, etc. are available as standard and can be supplied when specified.</p> <p><b>Gold Flashing/Plating</b> Gold flashing or gold plating can be provided over silver alloy when specified to improve storage characteristics, dry circuit switching, increase reliability when used infrequently or in corrosive atmospheres or limit contact resistance variation: (See under military specifications for rating of switches to JSS).</p>

## TYPICAL SWITCHING CONFIGURATIONS

Whilst an almost infinite variety of switching configurations are possible to meet every design requirement, layouts of certain typical configurations are provided below. It is to be noted that most switching requirements can be provided in a number of alternative layouts and the final choice is to be determined by design and manufacturing convenience for the particular case.

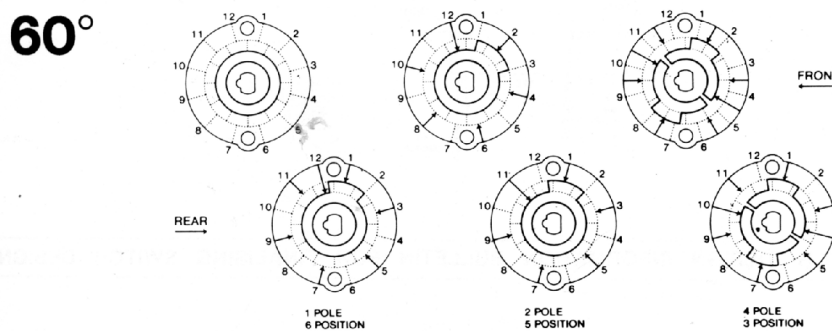
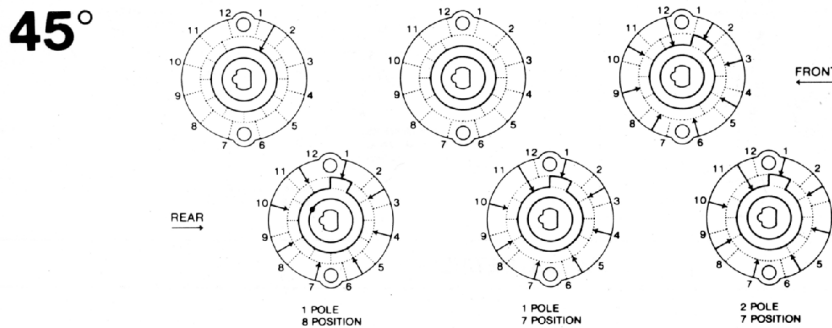
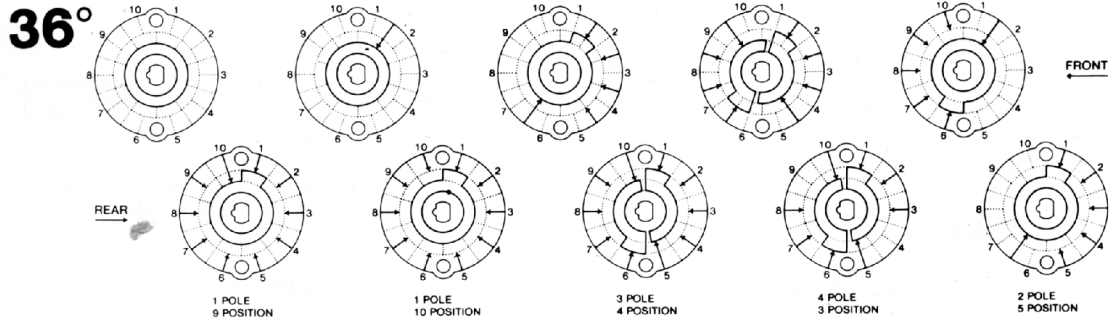


## STANDARD CONSTRUCTIONS

Switches are assembled with metallic spacers between index assembly and sections and between sections whenever required with bolts & nuts to hold the whole assembly together. Integrally moulded bosses on the stators serve for spacing the section when no clips or flat clips face each other. Optional assembly variations to include shields, brackets, etc. can be provided on request. For switches with more than 5 sections or extending more than 90mm behind the front mounting surface we recommend use of a bracket.

**NOTES:**

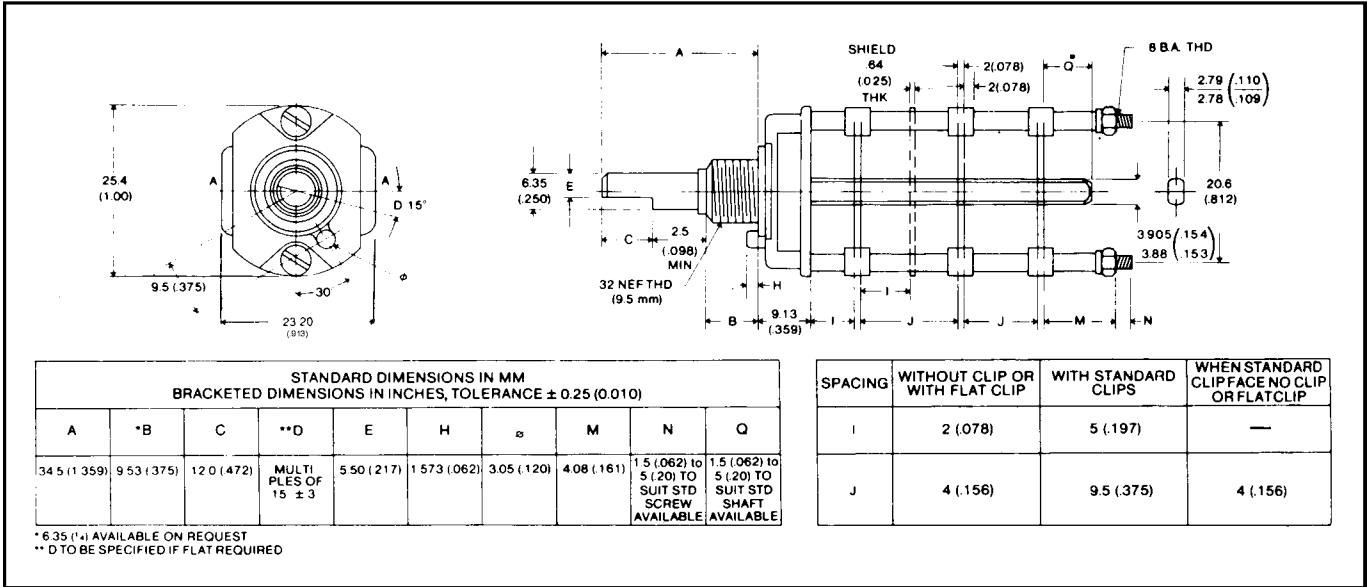
- 1) Clip positions shown are only typical. For internal design and manufacturing convenience, clip positions may be shifted, without affecting circuitry.
- 2) On circuits with fewer positions, short clips will be omitted from clock wise end of rotation. Example: 1 pole 10 way would have clip at position 11 omitted.
- 3) If Make before break contacts are required specify "Shorting" and if Break before make contacts are required. "Non-Shorting"
- 4) To adequately support the rotor in the stator, the rotor blades must cover at least 180° of rotor space on each side of stator. Where possible, use 360° rotor rings. If shorter blades are required, extra retaining segments may be added without affecting the electrical functioning. In any case a blade segment must necessarily have 2 mounting legs at legs for sufficient support.



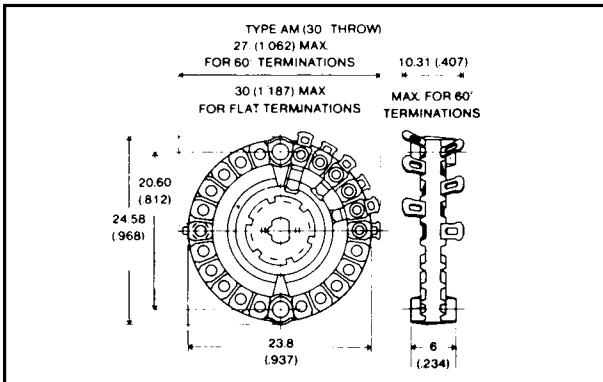
**MILITARY SPECIFICATIONS**

The Acorn switch is designed to meet the US MIL-S-3786/SR-05 requirements and is Type Approved in India to JSS 51207. To meet JSS 51207 requirements, switches should incorporate silver alloy (plain, gold flashed or gold plated) contacts, water sealing, (both shaft and index 'O' ring seals) and Stainless Steel shafts. Contact rating requirement for resistive loads as per SR W 02 of JSS 51207: 200mA at 28 V.DC 50 mA at 230 V. AC.

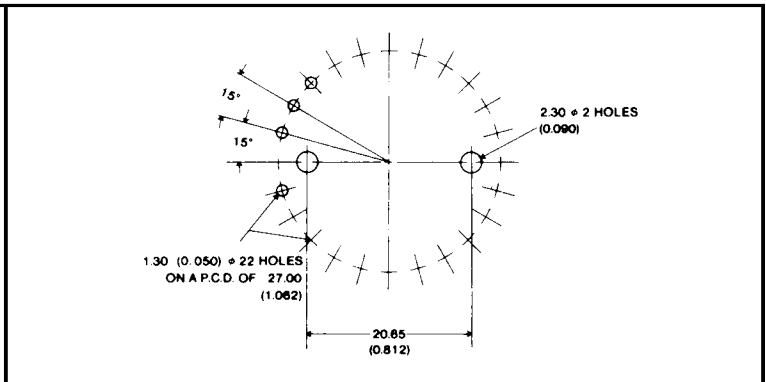
## GENERAL DIMENSIONAL DETAILS



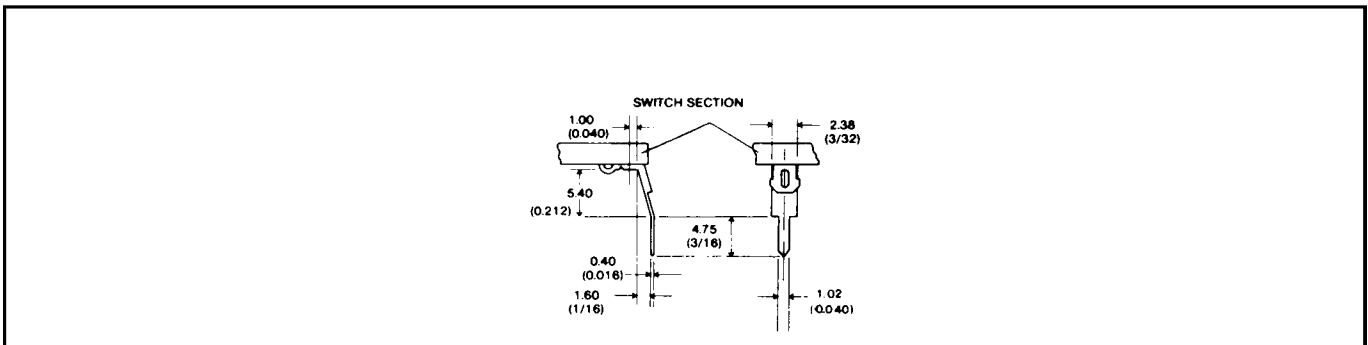
### WAFER DETAILS



### PC. LAYOUT



### PC. LUG DETAIL



**REFER ROTARY SWITCH DESIGN INFORMATION BULLETIN FOR FINALISING SWITCH DESIGN**