



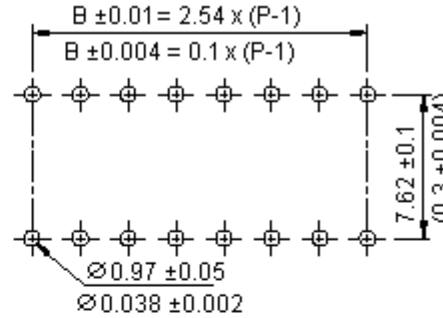
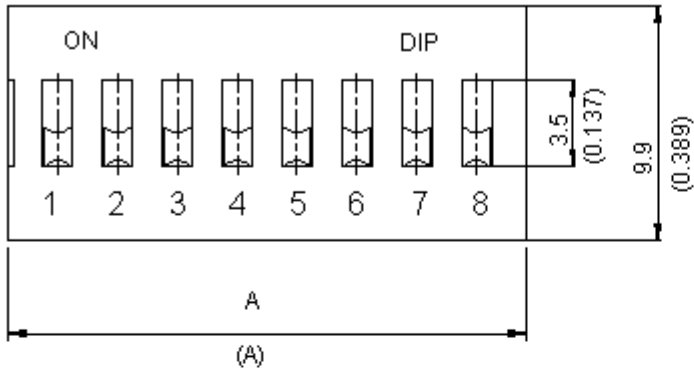
PART NO.

**MCD Series**

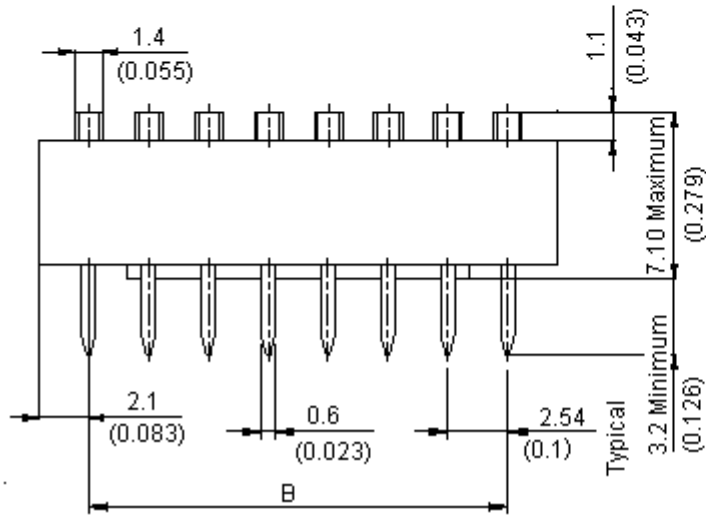
**REVISIONS**

ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
-	A	RELEASED	Ashok	18/01/12	Jagan	18/01/12	Farnell	01/02/12

**DS**



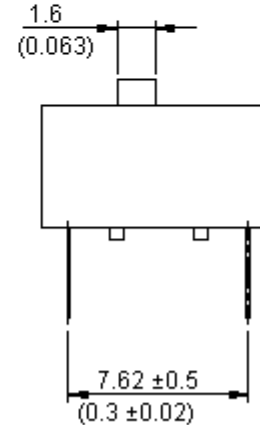
**PCB Layout**



**Schematic (Typical)**



**(2, 4, 6, 8, 10 and 12 Pos Avails)**



Dimensions : Millimetres (Inches)

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Ashok	18/01/12
<b>CHECKED BY:</b>	<b>DATE:</b>
Jagan	18/01/12
<b>APPROVED BY:</b>	<b>DATE:</b>
	01/02/12

<b>DRAWING TITLE:</b>			
<b>Switch - DS, DP, DA Series</b>			
<b>SIZE</b>	<b>DWG NO.</b>	<b>ELECTRONIC FILE</b>	<b>REV</b>
<b>A</b>	<b>M10001964</b>	<b>73742_DWG</b>	<b>A</b>
<b>SCALE: NTS</b>		<b>U.O.M.: mm</b>	<b>SHEET: 1 OF 5</b>



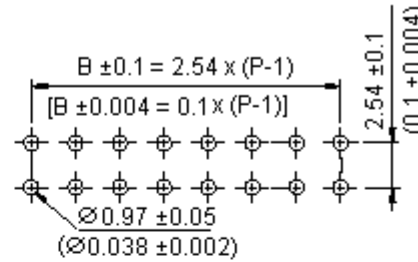
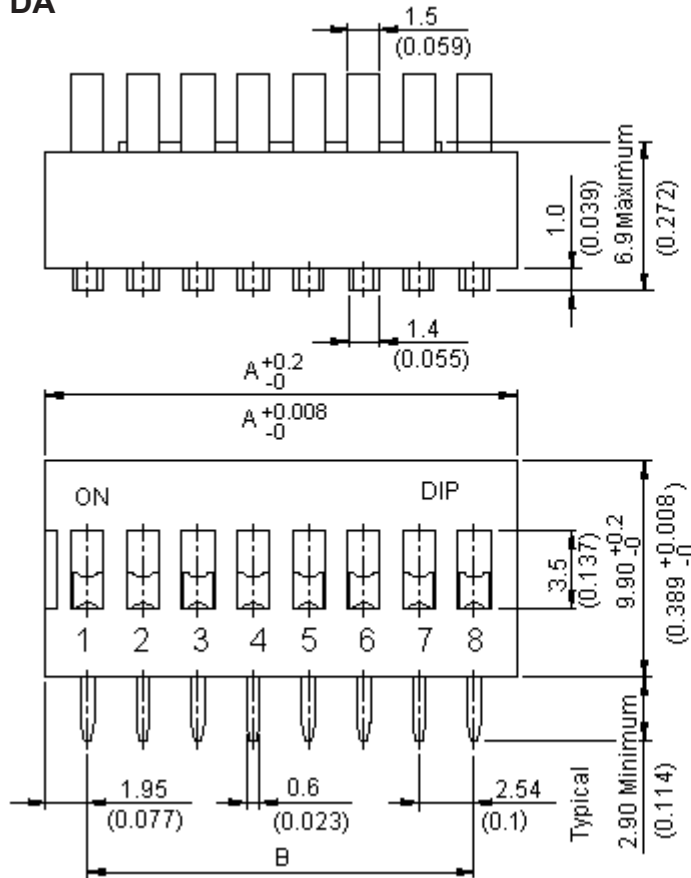
PART NO.

**MCD Series**

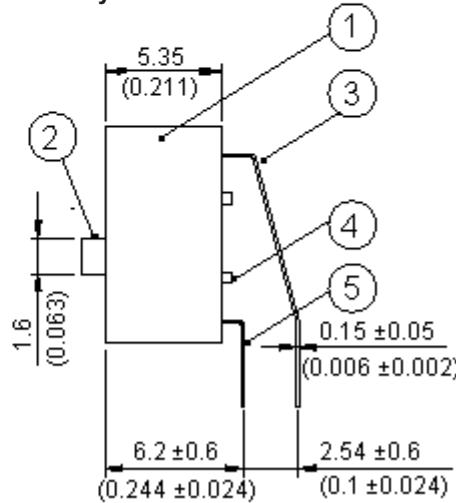
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-	A	RELEASED	Ashok	18/01/12	Jagan	18/01/12	Farnell	01/02/12

**DA**

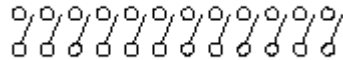


**PCB Layout**



**Schematic (Typical)**

Dimensions : Millimetres (Inches)



**(4, 6 and 8 Pos Avails)**

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Ashok

**DATE:**

18/01/12

**CHECKED BY:**

Veena

**DATE:**

18/01/12

**APPROVED BY:**

**DATE:**

01/02/12

**DRAWING TITLE:**

**Switch - DS, DP, DA Series**

**SIZE**

**A**

**DWG NO.**

**M10001964**

**ELECTRONIC FILE**

**73742\_DWG**

**REV**

**A**

**SCALE: NTS**

**U.O.M.: mm**

**SHEET: 2 OF 5**



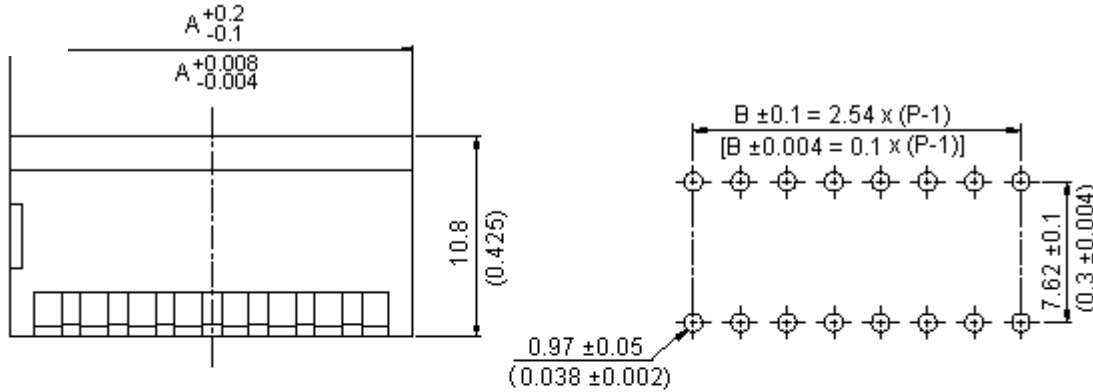
PART NO.

**MCD Series**

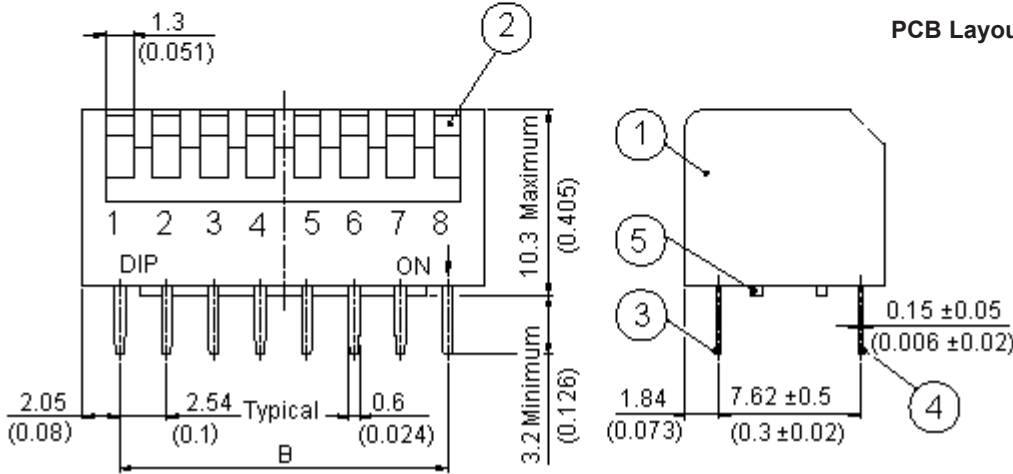
**REVISIONS**

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-	A	RELEASED	Ashok	18/01/12	Jagan	18/01/12	Farnell	01/02/12

**DP**



**PCB Layout**



**DP Series**

Dimensions : Millimetres (Inches)

**Schematic (Typical)**



(4, 6 and 8 Pos Avails)

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<b>CHECKED BY:</b>	<b>DATE:</b>
Veena	18/01/12
<b>APPROVED BY:</b>	<b>DATE:</b>
	01/02/12

**DRAWING TITLE:**

**Switch - DS, DP, DA Series**

<b>SIZE</b> A	<b>DWG NO.</b> M10001964	<b>ELECTRONIC FILE</b> 73742_DWG	<b>REV</b> A
<b>SCALE: NTS</b>		<b>U.O.M.: mm</b>	<b>SHEET: 3 OF 5</b>



PART NO.

**MCD Series**

**REVISIONS**

ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
-	A	RELEASED	Ashok	18/01/12	Jagan	18/01/12	Farnell	01/02/12

**Specifications:**

**Mechanical:**

Mechanical life : 2,000 operations per switch  
 Maximum operation force : 400 gf (DP Series)  
 : 1,000gf maximum (DS and DA Series)  
 Stroke : 2 mm  
 Operation temperature : -20°C to +70°C  
 Storage temperature : -40°C to +85°C

**Electrical:**

Electrical life : 2,000 operations per switch 24 V dc, 25 mA  
 Non-switching rating : 100 mA, 50 V dc  
 Switching rating : 25 mA, 24 V dc  
 Maximum contact resistance : 50 mΩ at initial  
 Insulation resistance : 100 MΩ  
 Dielectric strength : 500 V ac for one minute  
 Circuit : SPST

**Materials:**

Base : PBT thermoplastic  
 Colour : Black  
 Cover : PBT thermoplastic  
 Colour : Red, black and blue  
 Actuators : PBT high thermoplastic  
 Colour : White  
 Contact : Phosphor bronze with gold plating over nickel  
 Top seal : Polyester film  
 Potting material : Epoxy

**Soldering Process:**

Keep all switch contacts in their "OFF" position for all operations  
 Wave soldering : Recommended temperature at 500°F (260°C) maximum 5 seconds for through hole type  
 Hand soldering : Use a soldering iron of 30 watts, controlled at 350°C approximately maximum 5 seconds  
 Make sure switch is in "OFF" position during soldering process, or it will decrease the operating force and meanwhile increase the contact resistance  
 Do not wash the switch body except top tape sealed type, which suitable for spray cleaning method from top of the s/w

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	Ashok	18/01/12				
	<b>CHECKED BY:</b>	<b>DATE:</b>	<b>SIZE</b>	<b>DWG NO.</b>	<b>ELECTRONIC FILE</b>	<b>REV</b>
	Veena	18/01/12	A	M10001964	73742_DWG	A
<b>APPROVED BY:</b>	<b>DATE:</b>	<b>SCALE: NTS</b>		<b>U.O.M.: mm</b>		<b>SHEET: 4 OF 5</b>
	01/02/12					



PART NO.

**MCD Series**

**REVISIONS**

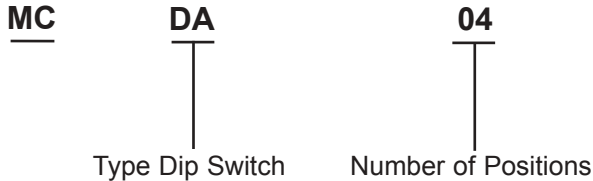
ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
-	A	RELEASED	Ashok	18/01/12	Jagan	18/01/12	Farnell	01/02/12

**Specification Table**

Number of Positions	A	B	Part Number
4	11.52 (0.454)	7.62 (0.300)	MCDA04
6	16.60 (0.654)	12.70 (0.500)	MCDA06
8	21.68 (0.854)	17.78 (0.700)	MCDA08
4	11.52 (0.454)	7.62 (0.300)	MCDS04
6	16.60 (0.654)	12.70 (0.500)	MCDS06
8	21.68 (0.854)	17.78 (0.700)	MCDS08
2	6.44 (0.254)	2.54 (0.100)	MCDS02
10	26.76 (1.054)	22.86 (0.900)	MCDS10
12	31.84 (1.254)	27.94 (1.100)	MCDS12
4	11.72 (0.461)	7.62 (0.300)	MCDP04
6	16.80 (0.661)	12.70 (0.500)	MCDP06
8	21.88 (0.861)	17.78 (0.700)	MCDP08

Dimensions : Millimetres (Inches)

**Part Number Explanation:**



**Type Dip Switch** : DA = Right Angle, DP = Piano and DS = Slide Type Dip Switch  
**Number of Positions** : 04 = 4, 06 = 6, 08 = 8, 02 = 2, 10 = 10 and 12 = 12 Positions

[www.element14.com](http://www.element14.com)  
[www.farnell.com](http://www.farnell.com)  
[www.newark.com](http://www.newark.com)

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<b>APPROVED BY:</b>	<b>DATE:</b>
	01/02/12

<b>DRAWING TITLE:</b>			
<b>Switch - DS, DP, DA Series</b>			
<b>SIZE</b>	<b>DWG NO.</b>	<b>ELECTRONIC FILE</b>	<b>REV</b>
A	M10001964	73742_DWG	A
<b>SCALE: NTS</b>		<b>U.O.M.: mm</b>	<b>SHEET: 5 OF 5</b>