

# MDG & MPG SERIES TRANSFER DIP SWITCHES SPDT & DPDT MODELS

## FEATURES

Gold plated contacts.  
Self-cleaning contacts.  
UL94V-O materials used throughout.  
Process compatible with tape seal.  
Dual in-line .100" x .300" term. spacing.

## GENERAL SPECIFICATIONS

### ELECTRICALS

Electrical life	2000 cycles minimum
Contact rating, non-switching	100 mA at 50 VDC
Contact rating, switching	25 mA at 24 VDC
Contact resistance	50 m $\Omega$ max. initial - 100 m $\Omega$ max. after life test
Insulation resistance at 100 VDC	1000 M $\Omega$ minimum
Dielectric strength	500 VDC for 1 minute
Capacitance	5 pf. max. between adjacent terminals

### MECHANICALS, THERMALS

Mechanical life	3000 cycles minimum
Operating force	MDG; 800 grmas max. per pole MPG; 400 grams max. per pole.
Vibration	Per MIL-STD-202, METHOD 204B
Humidity	95% relative humidity, 40°C for 96 hours
Temperature range	Operating: -25°C to 70°C Storage: -40°C to 85°C

### SOLDERING & CLEANING RECOMMENDATIONS

Hand soldering	320°C max. for 2 seconds max.(30 watt iron max.)
Wave soldering	230°C max. for 3 seconds max.
Cleaning (with tape seal)	Spray wash from top side only

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

## MATERIALS

Cover	UL94V-O, Polyamide
Actuators	UL94V-O, Polyamide
Contacts & Terminals	Gold over nickel plate over brass
Sealing	Epoxy
Tape seal	Polyester film

## PACKAGING

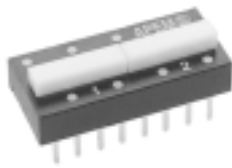
DIP switches are shipped in standard IC tubes with all actuators in the "OFF" position

## SWITCH CROSS SECTION



P

**MDG Series  
Slides  
DPDT**



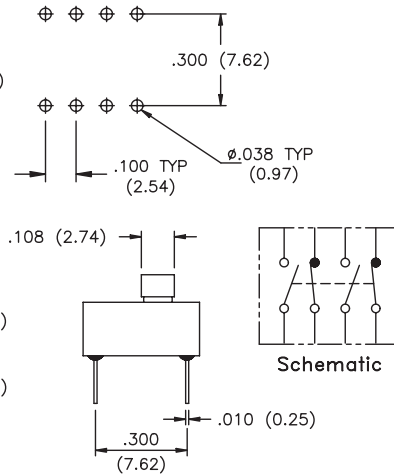
**MDG602S**

**Mechanical Outline**



**Printed circuit board layout**

Hole size and layout tolerance  
 $\pm .005$  (0.12) non-cumulative



Actuator Style & Contact Material	MODEL NO. with no tape seal	MODEL NO. with tape seal	No. of Pos.	'A' Dimension $\pm .012$ (0,30mm)
Std'd Act.	<b>MDG601S</b>	<b>MDG601ST</b>	1	.461 (11,7)
Gold Cont.	<b>MDG602S</b>	<b>MDG602ST</b>	2	.854 (21,7)

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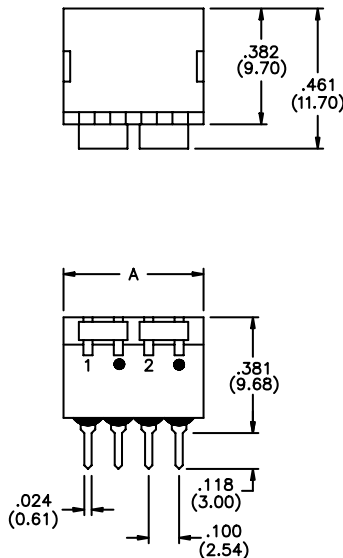
**P**

**MPG Series  
Piano  
SPDT**



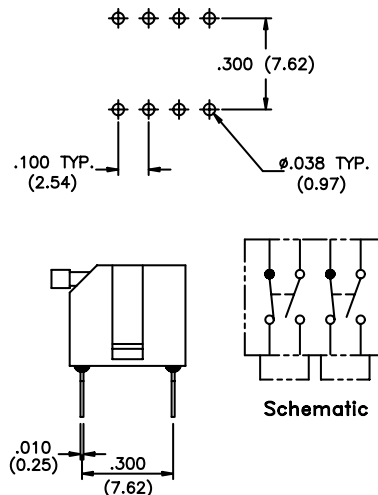
**MPG302B**

**Mechanical Outline**



**Printed circuit board layout**

Hole size and layout tolerance  
 $\pm .002$  (0.05) non-cumulative



Actuator Style & Contact Material	MODEL NO. with no tape seal	MODEL NO. with tape seal	No. of Pos.	'A' Dimension $\pm .012$ (0,30mm)
Piano	<b>MPG301B</b>	<b>MPG301BT</b>	1	.264 (6,7)
	<b>MPG302B</b>	<b>MPG302BT</b>	2	.461 (11,7)
	<b>MPG303B</b>	<b>MPG303BT</b>	3	.657 (16,7)
	<b>MPG304B</b>	<b>MPG304BT</b>	4	.854 (21,7)
Gold Contacts	<b>MPG305B</b>	<b>MPG305BT</b>	5	1.050 (26,7)
	<b>MPG306B</b>	<b>MPG306BT</b>	6	1.250 (31,8)