

AD SERIES

Auto Insertable and Surface Mountable Dip Switch

A-25-31

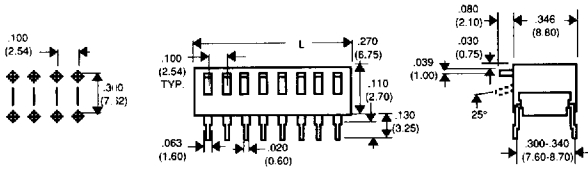
FEATURES

- Available in PC and surface mount termination versions.
- High pressure wiping contact allows aqueous or solvent cleaning without tape seal.
- Auto-insertable using insertion equipment from Amistar, Dynapert, Panasert, Northeastern Tool and Universal.*
- * Flush Actuator versions.
- Unique design can withstand vapor phase reflow or wave soldering conditions.

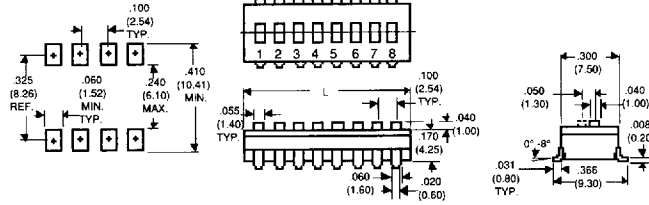
- Gastight contacts (280,000PSI).
- Ceramic substrate allows soldering temperatures of 245°C for up to 30 seconds.

POLES	BODYLENGTH 'L'	POLES	BODY LENGTH 'L'
2	0.278" (7.06mm)	7	0.778" (19.76mm)
3	0.378" (9.60mm)	8	0.878" (22.30mm)
4	0.478" (12.14mm)	9	0.978" (24.84mm)
5	0.578" (14.68mm)	10	1.078" (27.38mm)
6	0.678" (17.22mm)		

PC TERMINATION



S TERMINATION



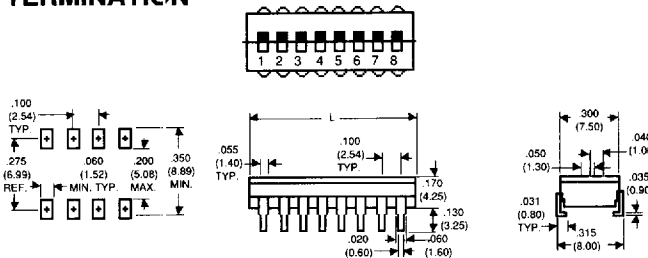
FLUSH ACTUATOR	FLUSH ACT. W/ TAPE	EXTENDED ACTUATOR	NO. OF POSITIONS	ACTUATOR STYLE
ADF02	AD F02T	ADE02	2	SLIDE
ADF03	AD F03T	ADE03	3	SLIDE
ADF04	AD F04T	ADE04	4	SLIDE
ADF05	AD F05T	ADE05	5	SLIDE
ADF06	AD F06T	ADE06	6	SLIDE
ADF07	AD F07T	ADE07	7	SLIDE
ADF08	AD F08T	ADE08	8	SLIDE
ADF09	AD F09T	ADE09	9	SLIDE
ADF10	AD F10T	ADE10	10	SLIDE

FLUSH ACTUATOR	FLUSH ACT. W/ TAPE	EXTENDED ACTUATOR	NO. OF POSITIONS	ACTUATOR STYLE
ADF02S	ADF02ST	ADE02S	2	SLIDE
ADF03S	ADF03ST	ADE03S	3	SLIDE
ADF04S	ADF04ST	ADE04S	4	SLIDE
ADF05S	ADF05ST	ADE05S	5	SLIDE
ADF06S	ADF06ST	ADE06S	6	SLIDE
ADF07S	ADF07ST	ADE07S	7	SLIDE
ADF08S	ADF08ST	ADE08S	8	SLIDE
ADF09S	ADF09ST	ADE09S	9	SLIDE
ADF10S	ADF10ST	ADE10S	10	SLIDE

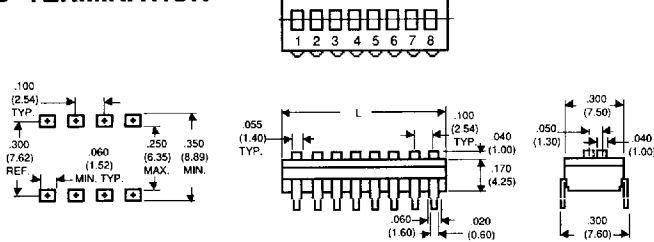
LEVER DOWN "ON"	LEVER UP "ON"	NO. OF POSITIONS	ACTUATOR STYLE
ADP02	ADPA02	2	PIANO
ADP04	ADPA04	4	PIANO
ADP05	ADPA05	5	PIANO
ADP06	ADPA06	6	PIANO
ADP07	ADPA07	7	PIANO
ADP08	ADPA08	8	PIANO
ADP09	ADPA09	9	PIANO
ADP10	ADPA10	10	PIANO

LEVER DOWN "ON"	LEVER UP "ON"	NO. OF POSITIONS	ACTUATOR STYLE
ADP02S	ADPA02S	2	PIANO
ADP04S	ADPA04S	4	PIANO
ADP05S	ADPA05S	5	PIANO
ADP06S	ADPA06S	6	PIANO
ADP07S	ADPA07S	7	PIANO
ADP08S	ADPA08S	8	PIANO
ADP09S	ADPA09S	9	PIANO
ADP10S	ADPA10S	10	PIANO

SA TERMINATION



SB TERMINATION



FLUSH ACTUATOR	FLUSH ACT. W/ TAPE	EXTENDED ACTUATOR	NO. OF POSITIONS	ACTUATOR STYLE
ADF02SA	ADF02SAT	ADE02SA	2	SLIDE
ADF03SA	ADF03SAT	ADE03SA	3	SLIDE
ADF04SA	ADF04SAT	ADE04SA	4	SLIDE
ADF05SA	ADF05SAT	ADE05SA	5	SLIDE
ADF06SA	ADF06SAT	ADE06SA	6	SLIDE
ADF07SA	ADF07SAT	ADE07SA	7	SLIDE
ADF08SA	ADF08SAT	ADE08SA	8	SLIDE
ADF09SA	ADF09SAT	ADE09SA	9	SLIDE
ADF10SA	ADF10SAT	ADE10SA	10	SLIDE

FLUSH ACTUATOR	FLUSH ACT. W/ TAPE	EXTENDED ACTUATOR	NO. OF POSITIONS	ACTUATOR STYLE
ADF02SB	ADF02SBT	ADE02SB	2	SLIDE
ADF03SB	ADF03SBT	ADE03SB	3	SLIDE
ADF04SB	ADF04SBT	ADE04SB	4	SLIDE
ADF05SB	ADF05SBT	ADE05SB	5	SLIDE
ADF06SB	ADF06SBT	ADE06SB	6	SLIDE
ADF07SB	ADF07SBT	ADE07SB	7	SLIDE
ADF08SB	ADF08SBT	ADE08SB	8	SLIDE
ADF09SB	ADF09SBT	ADE09SB	9	SLIDE
ADF10SB	ADF10SBT	ADE10SB	10	SLIDE

LEVER DOWN "ON"	LEVER UP "ON"	NO. OF POSITIONS	ACTUATOR STYLE
ADP02SA	ADPA02SA	2	PIANO
ADP04SA	ADPA04SA	4	PIANO
ADP05SA	ADPA05SA	5	PIANO
ADP06SA	ADPA06SA	6	PIANO
ADP07SA	ADPA07SA	7	PIANO
ADP08SA	ADPA08SA	8	PIANO
ADP09SA	ADPA09SA	9	PIANO
ADP10SA	ADPA10SA	10	PIANO

LEVER DOWN "ON"	LEVER UP "ON"	NO. OF POSITIONS	ACTUATOR STYLE
ADP02SB	ADPA02SB	2	PIANO
ADP04SB	ADPA04SB	4	PIANO
ADP05SB	ADPA05SB	5	PIANO
ADP06SB	ADPA06SB	6	PIANO
ADP07SB	ADPA07SB	7	PIANO
ADP08SB	ADPA08SB	8	PIANO
ADP09SB	ADPA09SB	9	PIANO
ADP10SB	ADPA10SB	10	PIANO

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.



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SOLDERING PROCESS RECOMMENDATION GUIDE

AUGAT/ INTCON PRDT GP

49E D ■ 1095335 0001533 628 ■ AUIP ○

The majority of customers utilizing miniature or sub miniature switches in the industry today have a great concern about the switches capabilities during their soldering and cleaning cycles. This concern centers around the introduction of contaminants into the switch contact area which could cause the switch to experience various failure modes either immediately or during the life cycle of the switches usage. These failure modes can show in a number of manners. The following are just a few examples: high contact resistance, open contacts, low dielectric strength breakdown, and high actuation forces causing use related applications to malfunction. Since most fluxes become active with the introduction of the high temperatures used in all soldering techniques, the switch must either prevent these fluxes from entering into its contact area or allow cleaning techniques to carry flux particles out. It must be understood that switch contamination can occur during any procedure: from hand soldering to the new age Surface Mount systems using vapor phase , I.R., or Convection chambers for solder reflow.

We at Augat/Alcoswitch offer a wide range of switches to handle any soldering operations. However, certain soldering conditions will not apply to all switches. The following conditions and charts should help assist you in the soldering of our switches in your application. If you need additional information, feel free to contact the factory.

SOLDERING TYPES

A. Wave Soldering:

Top & Bottom board preheats: 200°F(93°C) for approximately 3 to 4 minutes.
Solder Temperature and Dwell Time: 500°F(260°C) for approximately 3 to 5 seconds.

B. Hand Soldering

1. 500°F-600°F(260°C-316°C)utilizing a controlled 40 Watt iron for 3 to 5 seconds maximum.
2. 500°F(260°C) utilizing a controlled 30 Watt iron for 10 seconds maximum.

C. Dip Soldering

Solder Temperature & Dwell Time: 500°F(260°C) for 10 seconds maximum.

D.Surface Mount

1. Convection IR
Zone 1 = 212°F(100°C) for 120 seconds maximum.
Zone 2 = 419°F(215°C) is reaches in approximately 160 seconds after zone 1, and held at that temperature for approximately 10 seconds.
2. Radiant IR
Zones 1 & 2 combined = 330°F(166°C) maximum with a total run of 210°C(99°C) seconds.
Zone 3 & 4 combined = 460°F(238°C) is reached in approximately 30 seconds after zones 1 & 2 and held at that temperature for approximately 10 seconds.
3. Vapor Phase
Zone 1 = 140°F (60°C) for 15 seconds.
Zone 2 = 419°F(215°C) for 30 seconds.

CLEANING TYPES

- A. Solvent Wash (1.1.1 Trichlorethylene, T.M.S., T.M.C.)
- B. Vapor Degreasing
- C. Solvent Immersion
- D. Aqueous Cleaning

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SWITCH SERIES	SOLDERING TYPE			SURFACE MOUNT PROCESS			CLEANING PROCESSES			
	Wave	Hand	Dip*	Convection I.R.	Radiant I.R.	Vapor Phase	Solvent Wash	Vapor Degrease	Solvent Immerse	Aqueous Clean
ALCO ®										
AP, AT, AS SERIES	X	X	X				X			X
ALE,ATLE,ATE,APBE	X	X	X				X	X	X	X
ASE & F	X	X	X	X	X	X	X	X	X	X
COMMAND SERIES, PC	X	X								
COMMAND SERIES, LUGS		X								
CST/CSS SERIES	X	X	X				X	X	X	X
DIP ROT.: DR,RR &RA/C	X	X	X				X	X	X	X
DIP ROT.: DRS SERIES	X	X	X				X	X		X
DIPS:AD,AR,AA/C,ATT	X	X	X	X		X	X	X	X	X
DIPS:DP SERIES W/O TAPE		X	X				X			
DIPS:DP SERIES W/TAPE	X	X	X				X	X	X	X
DIPS:DTS WITH TAPE	X	X	X				X	X	X	X
DIPS:DTS,DYS W/O TAPE		X	X				X			
DIPS:S SERIES SIPS	X	X	X	X		X	X	X	X	X
DIPS:DPT WITH TAPE	X	X	X				X	X	X	X
DIPS:DPU WITHOUT TAPE		X	X							
DIPS:DSS101	X	X	X							
FSB1, FSB2		X	X							
FSM SERIES		X								
FT2D,FT1D	X	X	X				X	X	X	X
GEMINI: A SERIES	X	X	X				X			
GEMINI: AE SERIES	X	X	X				X	X	X	X
GREEN SERIES: ALL MT VERSIONS		X	X				X	X		
GREEN SERIES: ALL MT VERSIONS PC	X	X	X				X			
GREEN SERIES: MHV,MRV,MLD		X	X				X	X		
GREEN SERIES: MPA-6,MPG,MPN,MPE		X	X				X	X		
GREEN SERIES: MTE		X	X				X	X		
LVP/LHP SERIES	X	X	X							
MAS SERIES		X	X					X	X	
MHS SERIES	X	X	X				X	X	X	X
MKS SERIES	X	X	X				X	X	X	
MLP SERIES		X	X				X			
MM-9 SERIES		X	X							
MMS SERIES		X	X				X	X		
MPA-3 SERIES		X	X				X	X		
MPA-6 SERIES		X	X				X			
MPB SERIES		X	X				X	X		
MPN SERIES		X	X				X			
MPS SERIES		X	X				X	X		
MRBA SERIES		X	X				X	X		
MRC SERIES		X	X				X	X		
MRJ SERIES	X	X	X				X			
MRJE/MRJB SERIES	X	X	X				X	X	X	X
MRS SERIES	X	X	X				X	X		X

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SWITCH SERIES	SOLDERING TYPE			SURFACE MOUNT PROCESS			CLEANING PROCESSES			
	Wave	Hand	Dip*	Convection I.R.	Radiant I.R.	Vapor Phase	Solvent Wash	Vapor Degrease	Solvent Immerse	Aqueous Clean
MRS-RA SERIES	X	X	X				X	X		
MRSB SERIES	X	X	X				X	X	X	X
MRSK SERIES		X	X				X	X		
MSP-3 /MSPS SERIES		X	X							
MSP-5 SERIES		X	X				X	X		
MSPF SERIES		X	X				X	X		
MSPM SERIES		X	X				X	X		
MSS SERIES	X	X	X				X	X	X	X
MSSA SERIES	X	X	X				X	X	X	X
MSSA-01 & 04	X	X	X				X	X	X	X
PBL SERIES	X									X
PUSHWHEELS, CARD EDGE		X								
PUSHWHEELS, PC PINS	X	X	X							
QAS SERIES		X	X				X			
SC CIRCUIT BREAKERS	X	X								
SDS SERIES	X	X	X				X	X	X	X
SE SERIES	X	X	X				X	X	X	X
SKC SERIES		X								
SKF SERIES		X								
SKFC1		X	X				X	X		
SKFC2L		X								
SKT SERIES		X	X				X	X		
SL SERIES	X	X	X				X	X	X	
SLS/SLSA SERIES	X	X	X				X	X	X	
SMT/SMP:PC,PCV,RA,VRA	X	X	X				X	X	X	X
SMT/SMP:SPC,SRA,SRAB				X	X	X	X	X	X	X
SSA/SSJ SERIES	X	X	X				X	X		
SSB SERIES	X	X	X				X	X	X	X
SSM SERIES	X	X	X				X	X	X	X
STS SERIES	X	X	X				X	X	X	X
SWK SERIES		X								
TP SERIES: ALL PC/BLUE CASES	X									
TP SERIES:TP-ES	X	X	X				X	X	X	X
TP SERIES:W/TACT. FEEL & PROC. SEAL	X	X	X				X	X	X	X
TP SERIES:TPC,TPD,TPF,TP-N		X	X				X	X		
TP200 SERIES:TP1M,TP1L,TP2M,TP2L		X	X				X	X		
TR SERIES	X	X	X				X			
TRD	X	X	X				X			
TRD W/L.E.D.		X	X							
TS SERIES	X	X	X				X	X	X	X
TSS-PC, TSS-RA	X	X					X			
TT ALL PC/BLUE CASES	X	X					X			
TT,TTE-ES,TT-RA	X	X	X				X	X	X	X
TT,TTETT,TTE,TTN-WIRE LUG		X	X				X			
XR110, XR210, XRM		X								

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