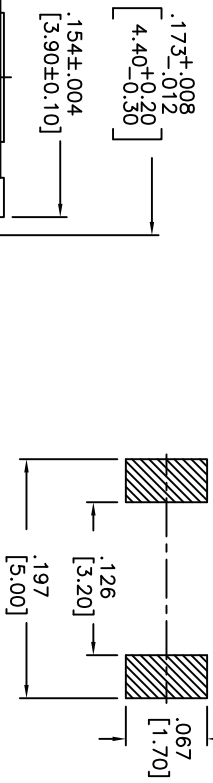
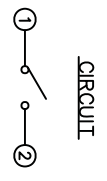
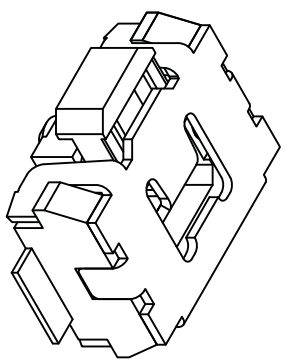
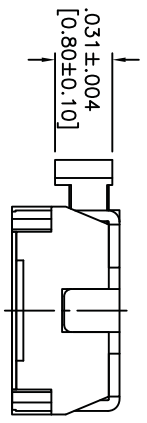
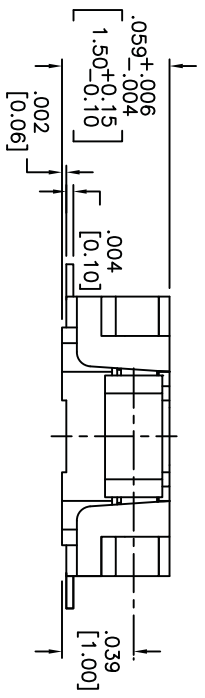
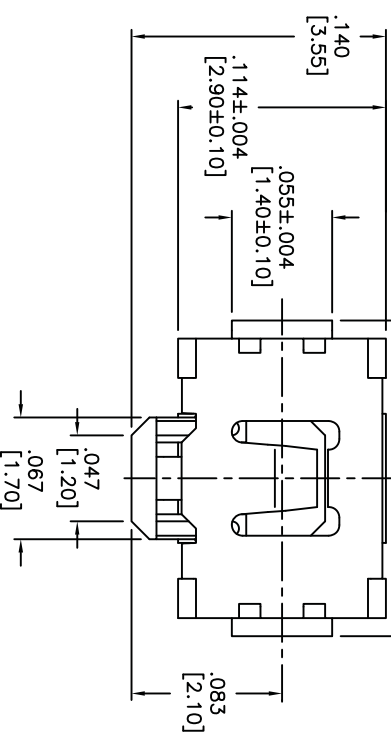


THIS DOCUMENT IS THE PROPERTY OF APDM COMPONENTS AND SHALL NOT BE COPIED, REPRODUCED, DISCLOSED OR USED AS THE BASIS FOR MANUFACTURING OR SALE WITHOUT PERMISSION OF A DULY AUTHORIZED REPRESENTATIVE OF APDM COMPONENTS INC.



HATCHED AREA SHOWS SOLDERING LAND.
P.C.B. LAYOUT
UNLESS OTHERWISE SPECIFIED
ALL P.C. TOLERANCES ARE ±.002 [0.05]

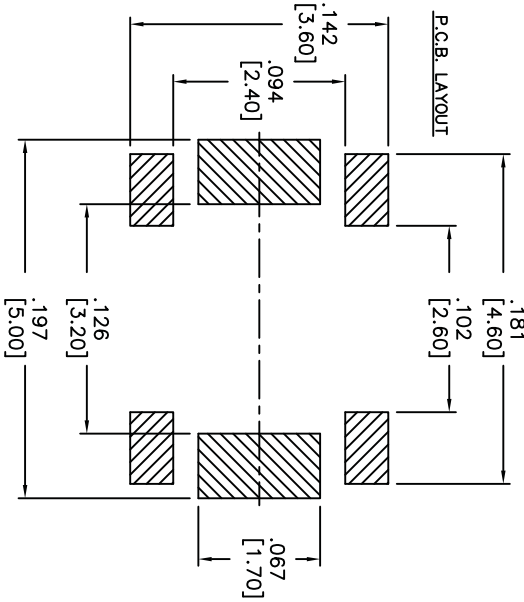
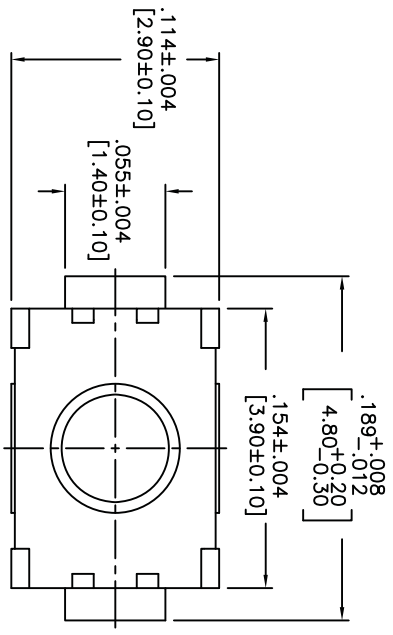


DATE	SYM	REVISION RECORD	DWN.	CK.
5/08	A	ECO# 778	CD	PD

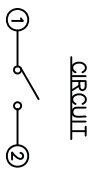
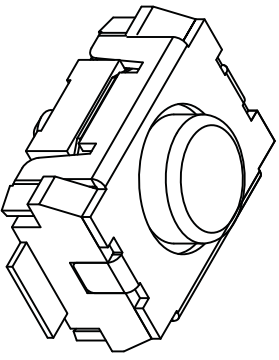
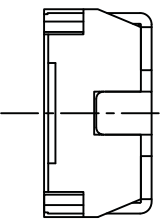
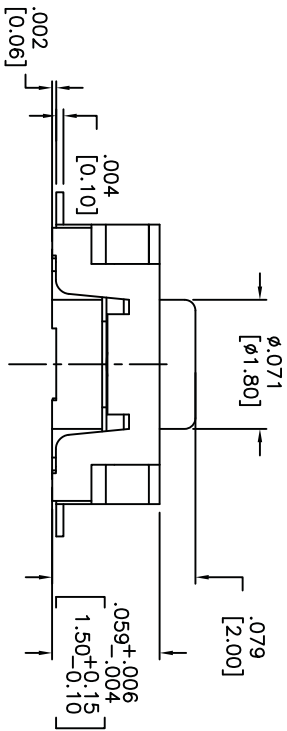
DESCRIPTION: SIDE PUSH MECHANICAL CONTACT SWITCH.
SPECIFICATIONS:
OPERATION FORCE: 220± 65gf
STROKE: 0.2±0.08mm
OPERATION TEMP.: -25°C TO +70°C.
STORAGE TEMP.: -30°C TO +80°C.
ELECTRICAL LIFE: 100,000 CYCLES.
RATING: 50mA, 12VDC.
CONTACT RESISTANCE: 100mΩ MAX.
INSULATION RESISTANCE: 100MΩ MIN. AT 100VDC.
DIELECTRIC STRENGTH: 100VAC/1 MINUTE.
CONTACT ARRANGEMENT: 1 POLE 1 THROW.
VIBRATION TEST: PASSED METHOD 201A
MIL-STD-202F.
SHOCK TEST: 50G PER METHOD 213B CONDITION A OF MIL-STD-202F
MATERIALS:
COVER: STAINLESS STEEL
BASE: LCP HIGH-TEMP. THERMOPLASTIC.
COLOR, WHITE.
STEM: LCP HIGH-TEMP. THERMOPLASTIC.
COLOR, BLACK.
CONTACT DISK: STAINLESS STEEL WITH SILVER CLADDING
TERMINAL: BRASS WITH SILVER PLATING
PACKAGING: TAPE AND REEL (3,500 PIECES PER REEL)
ROHS COMPLIANT
LEAD FREE SOLDERING COMPATIBLE
HAND SOLDERING: 320°c MAX WITH 30 WATT IRON FOR 2 SECONDS
IR REFLOW: 260°C MAX
CUSTOMER PART NO.: 263262

APDM <small>APDM COMPONENTS INC.</small> 63 Neck Rd. Torrington, CT 06869 Phone: 860-772-3534 Fax: 860-772-3534		PPN: CJD BR: PJD
DESIGNS: CRITICAL DIMENSION TOLERANCES <small>(UNLESS AS NOTED)</small> .XX±.02[0.05] .XXX±.008[0.20] .XXXX±.0008[0.02] ANGLE = 40.5°	TITLE TACT SWITCH	SHEET 1 OF 1 SIZE B SCALE 15:1 THIRD ANGLE PROJECTION
DO NOT SCALE DATE: 7/31/06 DRAWING NO.: AMPFTVTR		REV: A

THIS DOCUMENT IS THE PROPERTY OF APEN COMPONENTS AND SHALL NOT BE COPIED, REPRODUCED, DISCLOSED OR USED AS THE BASIS FOR MANUFACTURING OR SALE WITHOUT PERMISSION OF A DULY AUTHORIZED REPRESENTATIVE OF APEN COMPONENTS INC.



HATCHED AREA SHOWS SOLDERING LAND

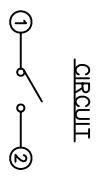
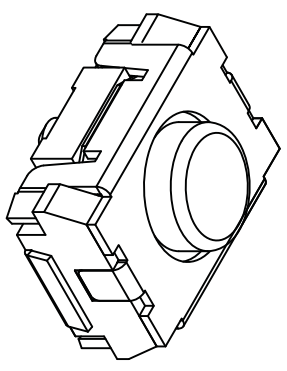
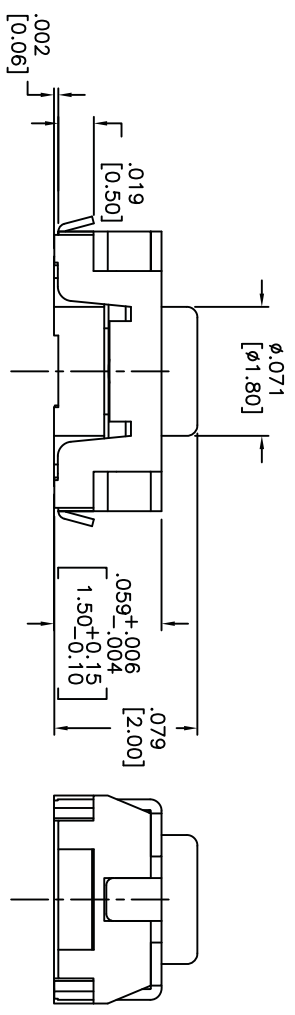
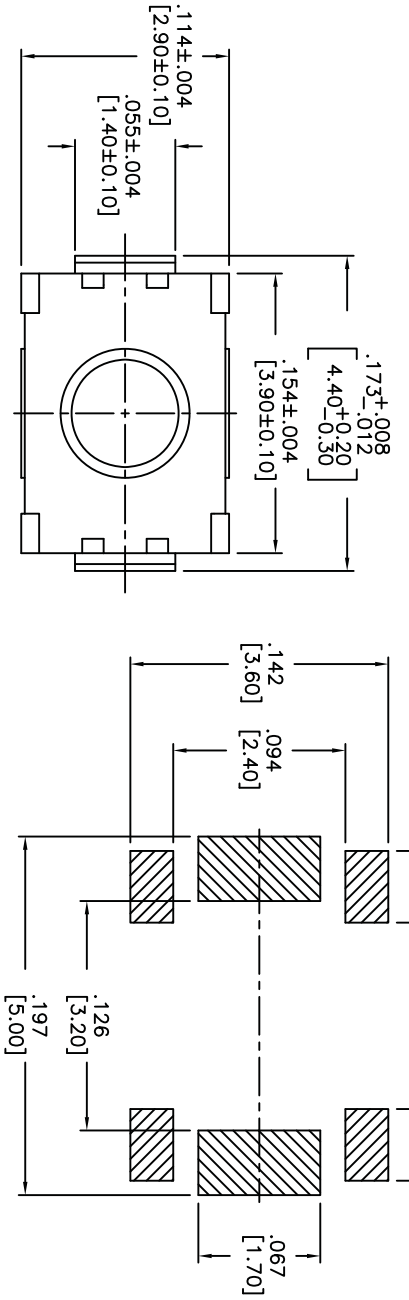


DATE	SYM	REVISION RECORD	DWN.	CK.
5/08	B	ECO# 778	CD	PD

DESCRIPTION: VERTICAL PUSH MECHANICAL CONTACT SWITCH.
 SPECIFICATIONS:
 OPERATION FORCE: 160±50gf
 OPERATION TEMP.: -25°C TO +70°C.
 STORAGE TEMP.: -30°C TO +80°C.
 ELECTRICAL LIFE: 100,000 CYCLES.
 RATING: 50ma, 12VDC.
 VIBRATION RESISTANCE: PASSES METHOD 201A MIL-STD-202F
 MIL-STD-202F SHOCK RESISTANCE: 50G PER METHOD 213B MIL-STD-202F
 CONTACT RESISTANCE: 100mΩ MAX.
 INSULATION RESISTANCE: 100MΩ MIN. AT 100VDC.
 DIELECTRIC STRENGTH: 100VAC/1 MINUTE.
 CONTACT ARRANGEMENT: 1 POLE 1 THROW.
 MATERIALS:
 COVER: STAINLESS STEEL
 BASE: LCP HIGH-TEMP. THERMOPLASTIC.
 COLOR, WHITE.
 STEM: LCP HIGH-TEMP. THERMOPLASTIC.
 COLOR, BLACK
 CONTACT DISK: STAINLESS STEEL WITH SILVER CLADDING
 TERMINAL: BRASS WITH SILVER PLATING
 TAPE: TEFLON.
 TAPE & REEL PACKAGING, 2,000 PER REEL
 SOLDERING:
 HAND SOLDERING: 30 WATT IRON AT 320°C FOR 2 SECONDS
 IR REFLOW: 240°C MAX
 ROHS COMPLIANT

Q.A. INSPECT:	DESIGNER'S INITIAL:	APEN	63 Neck Rd. Haverhill, MA 01830 Tel: 978-372-5554 Fax: 978-372-5554	DRN. CJD	
TOLERANCES (except as noted) XX=±0.02(0.5) XXX=±0.008(0.20) XXXX=±0.0008(0.02) ANGLE = 30.5°	TITLE VERTICAL PUSH TACT SWITCH	SHEET 1 OF 1	SIZE B	SCALE 15:1	THIRD ANGLE PROJECTION
DO NOT SCALE DIMENSIONS	DATE 2/4/08	DRAWING NO. AMPPTFGP2VTR	REV B		

THIS DOCUMENT IS THE PROPERTY OF APDM COMPONENTS AND SHALL NOT BE COPIED, REPRODUCED, DISCLOSED OR USED AS THE BASIS FOR MANUFACTURING OR SALE WITHOUT PERMISSION OF A DULY AUTHORIZED REPRESENTATIVE OF APDM COMPONENTS INC.



HATCHED AREA SHOWS SOLDERING LAND

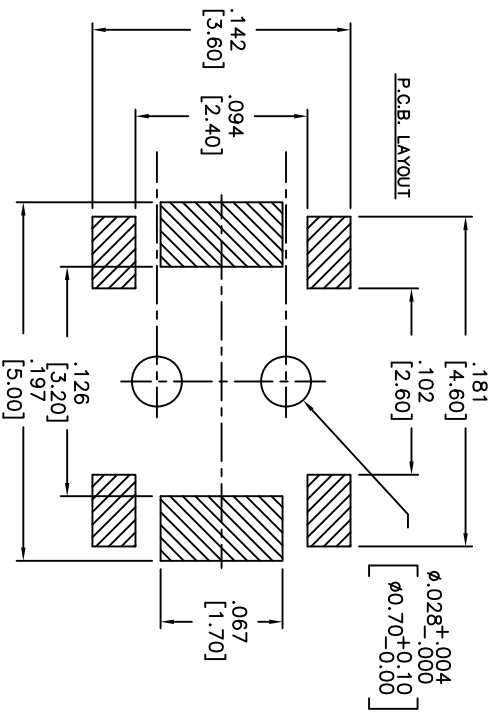
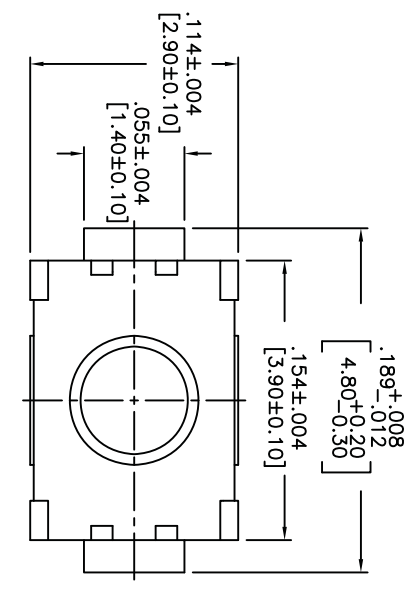
DATE	SYM	REVISION RECORD	DWNL	CK
5/08	B	ECO# 778	CD	PD

DESCRIPTION: VERTICAL PUSH MECHANICAL CONTACT SWITCH.
 SPECIFICATIONS:
 OPERATION FORCE: 160± 50gf
 OPERATION TEMP.: -25°C TO +70°C.
 STORAGE TEMP.: -30°C TO +80°C.
 ELECTRICAL LIFE: 100,000 CYCLES.
 RATING: 50mA, 12VDC.
 VIBRATION RESISTANCE: PASSES METHOD 201A MIL-STD-202F
 SHOCK RESISTANCE: 50G PER METHOD 213B MIL-STD-202F
 CONTACT RESISTANCE: 100mΩ MAX.
 INSULATION RESISTANCE: 100MΩ MIN. AT 100VDC.
 DIELECTRIC STRENGTH: 100VAC/1 MINUTE.
 CONTACT ARRANGEMENT: 1 POLE 1 THROW.
 MATERIALS:
 COVER: STAINLESS STEEL
 BASE: LCP HIGH-TEMP. THERMOPLASTIC.
 COLOR, WHITE.
 STEM: LCP HIGH-TEMP. THERMOPLASTIC.
 COLOR, BLACK.
 CONTACT DISK: STAINLESS STEEL
 WITH SILVER CLADDING
 TERMINAL: BRASS WITH SILVER PLATING
 TAPE: TEFLON.
 TAPE & REEL PACKAGING, 2,000 PER REEL
 SOLDERING:
 HAND SOLDERING: 30 WATT IRON AT 320°C FOR 2 SECONDS
 IR REFLOW: 240°C MAX
 ROHS COMPLIANT

Q.A. INSPECT:		DESIGNER'S CRITICAL DIMENSION		TOLERANCES (UNLESS OTHERWISE SPECIFIED)		TITLE		DATE		DRAWING NO.		REV	
APDM		APDM		.XX = ±.02(.05) .XXX = ±.008(.020) .XXXX = ±.0008(.002)		VERTICAL PUSH TACT SWITCH		2/4/08		AMPTLGP2VTR		B	
63 Nork Rd. Haverhill, MA 01830 Tel: 978-372-5554 Fax: 978-372-5554		P.N. CJD		1 OF 1		15:1							

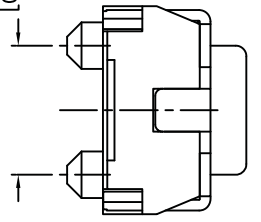
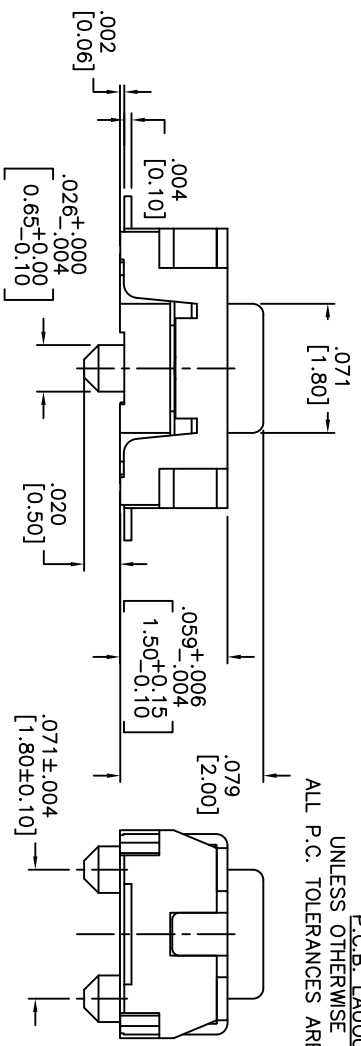
1 2 3 4 5 6 7 8

THIS DOCUMENT IS THE PROPERTY OF APDM COMPONENTS AND SHALL NOT BE COPIED, REPRODUCED, DISCLOSED OR USED AS THE BASIS FOR MANUFACTURING OR SALE WITHOUT PERMISSION OF A DULY AUTHORIZED REPRESENTATIVE OF APDM COMPONENTS INC.

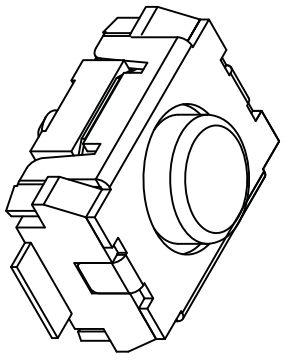


HATCHED AREA SHOWS SOLDERING LAND

P.C.B. LAYOUT
UNLESS OTHERWISE SPECIFIED
ALL P.C. TOLERANCES ARE ±.002 [0.50]



CIRCUIT



DATE	SYM	REVISION RECORD	DWN.	CK.
5/08	B	ECO# 778	CD	PD

DESCRIPTION: VERTICAL PUSH MECHANICAL CONTACT SWITCH.

SPECIFICATIONS:

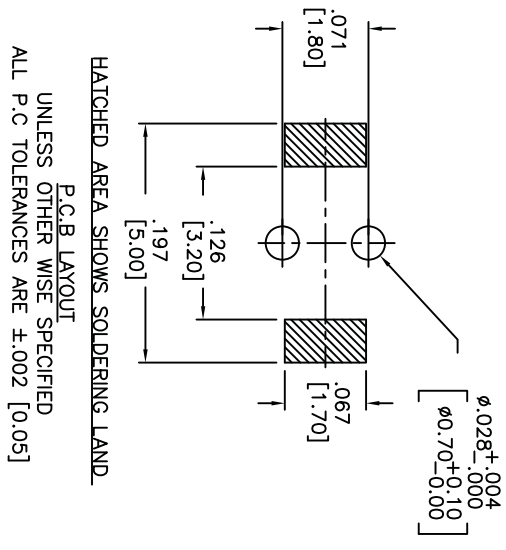
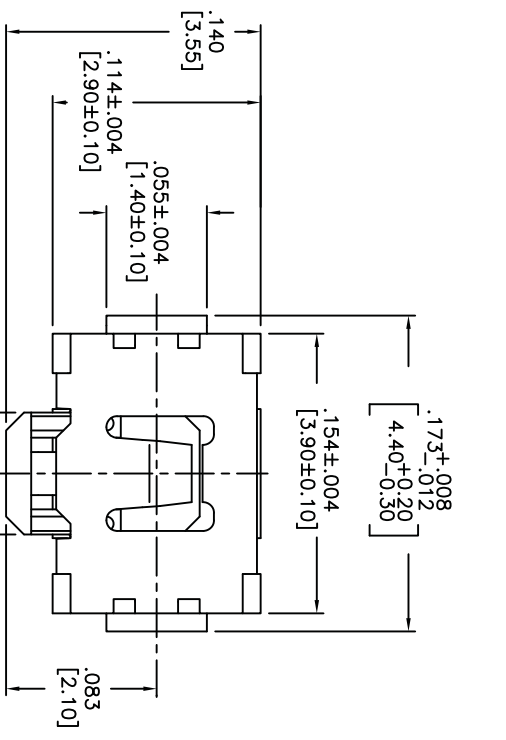
OPERATION FORCE: 160± 50gf
 OPERATION TEMP.: -25°C TO +70°C.
 STORAGE TEMP.: -30°C TO +80°C.
 ELECTRICAL LIFE: 200,000 CYCLES.
 RATING: 50ma, 12VDC.
 VIBRATION RESISTANCE: PASSES METHOD 201A
 MIL-STD-202F
 SHOCK RESISTANCE: 50G PER METHOD 213B
 MIL-STD-202F
 CONTACT RESISTANCE: 100mΩ MAX.
 INSULATION RESISTANCE: 100MΩ MIN. AT 100VDC.
 DIELECTRIC STRENGTH: 100VAC/1 MINUTE.
 CONTACT ARRANGEMENT: 1 POLE 1 THROW.
 TRAVEL: .005 ±.002 [0.13 ±0.05]

MATERIALS:

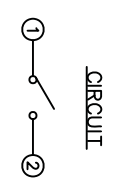
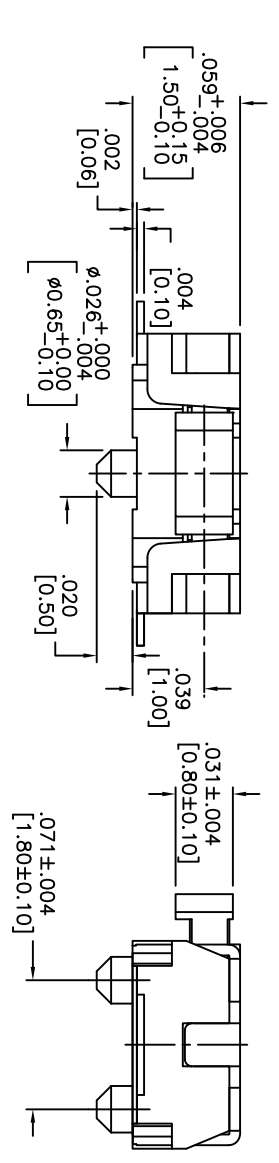
COVER: STAINLESS STEEL
 BASE: LCP HIGH-TEMP. THERMOPLASTIC.
 COLOR, WHITE.
 STEM: LCP HIGH-TEMP. THERMOPLASTIC.
 COLOR, BLACK.
 CONTACT DISK: STAINLESS STEEL WITH SILVER CLADDING
 TERMINAL: BRASS WITH SILVER PLATING
 TAPE: TEFLON.
 TAPE & REEL PACKAGING: 2,000 PER REEL
 SOLDERING:
 HAND SOLDERING: 30 WATT IRON AT 320°C FOR 2 SECONDS
 IR REFLOW: 240°C MAX
 ROHS COMPLIANT

Q.A. INSPECT:	DESIGNER'S INITIAL:	APDM	63 Neck Rd. Haverhill, MA 01830 APDM COMPONENTS INC. Phone: 978-372-3534	DRN. CJD
TOLERANCES (UNLESS OTHERWISE SPECIFIED) .XX=±0.02[0.5] .XXX=±0.008[0.20] .XXXX=±0.0008[0.02] ANGLE = 30.5°	INCH SHEET SIZE SCALE THIRD ANGLE PROJECTION	1 OF 1 B 15:1		
TITLE TACT SWITCH				
DATE: 6/30/05	DRAWING NO. AMPTCFGP2VTR			REV B

THIS DOCUMENT IS THE PROPERTY OF APEM COMPONENTS AND SHALL NOT BE COPIED, REPRODUCED, DISCLOSED OR USED AS THE BASIS FOR MANUFACTURING OR SALE WITHOUT PERMISSION OF A DULY AUTHORIZED REPRESENTATIVE OF APEM COMPONENTS INC.



HATCHED AREA SHOWS SOLDERING LAND
P.C.B. LAYOUT
UNLESS OTHER WISE SPECIFIED
ALL P.C. TOLERANCES ARE ±.002 [0.05]



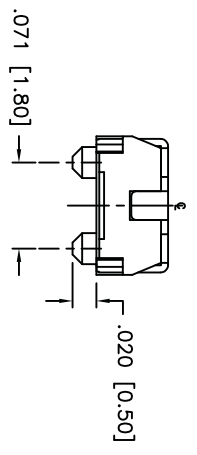
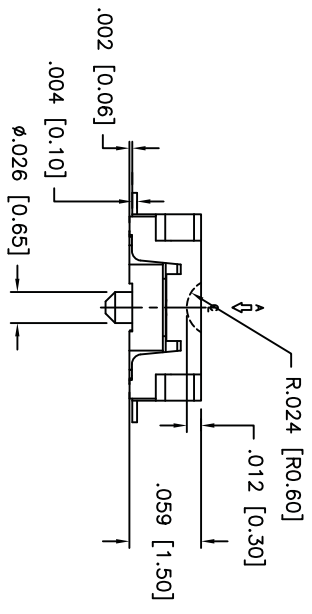
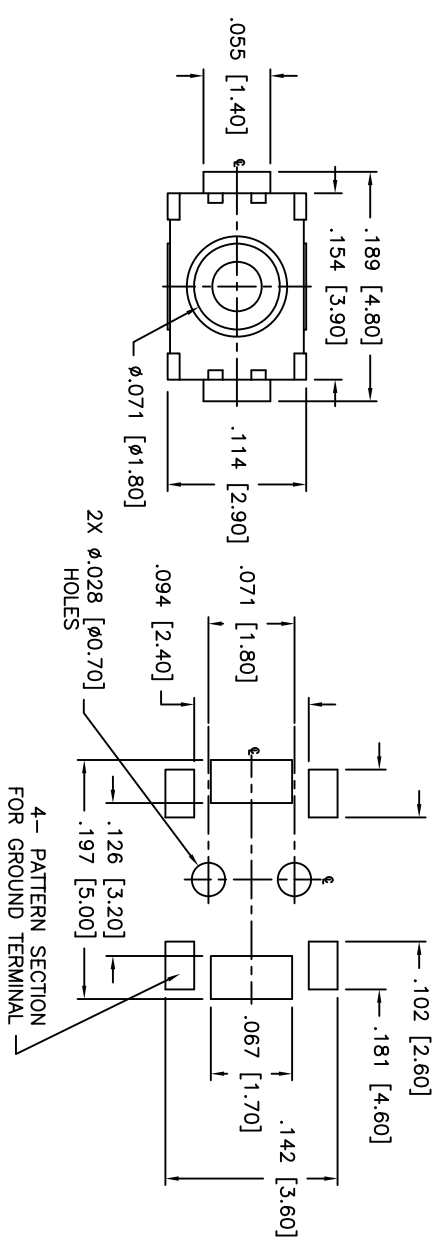
DATE	SYM	REVISION RECORD	DWN.	CK.
5/08	B	ECO# 778	CD	PD

DESCRIPTION: SIDE PUSH MECHANICAL CONTACT SWITCH.
SPECIFICATIONS:
OPERATION FORCE: 220± 65gf
STROKE: 0.2±0.10mm
OPERATION TEMP.: -25°C TO +70°C.
STORAGE TEMP.: -30°C TO +80°C.
ELECTRICAL LIFE: 100,000 CYCLES.
RATING: 50mA, 12VDC.
CONTACT RESISTANCE: 100mΩ MAX.
INSULATION RESISTANCE: 100MΩ MIN. AT 100VDC.
DIELECTRIC STRENGTH: 100VAC/1 MINUTE.
CONTACT ARRANGEMENT: 1 POLE 1 THROW.
VIBRATION TEST: PASSED METHOD 201A
MIL-STD-202F.
SHOCK TEST: 50G PER METHOD 213B CONDITION A OF MIL-STD-202F
MATERIALS:
COVER: STAINLESS STEEL
BASE: LCP HIGH-TEMP. THERMOPLASTIC.
COLOR, WHITE.
STEM: LCP HIGH-TEMP. THERMOPLASTIC.
COLOR, BLACK.
CONTACT DISK: STAINLESS STEEL
WITH SILVER CLADDING
TERMINAL: BRASS WITH SILVER PLATING
PACKAGING: TAPE AND REEL
(3,500 PEICES PER REEL)
ROHS COMPLIANT
LEAD FREE SOLDERING COMPATIBLE
HAND SOLDERING: 320°C MAX WITH 30 WATT IRON FOR 2 SECONDS
IR REFLOW: 260°C MAX

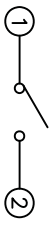
DESIGNER'S INITIAL		DIMENSION		TOLERANCES (except as noted)		TITLE		DATE		DRAWING NO.		REV	
A.A. INSECTI		A		X.XX=±0.05 .XXX=±0.008 [0.20] .XXXX=±0.0008 [0.02] ANGLE = 30.5°		TACT SWITCH		5/2/06		AMPTCFVTR		B	
APEM		63 Neck Rd. Horseshoe Mill, VA 01835 Phone: 757-372-3534 FAX: 757-372-3534		P.N. CJD		1 OF 1		15:1		THIRD ANGLE PROJECTION		REV	

1 2 3 4 5 6 7 8

THIS DOCUMENT IS THE PROPERTY OF APDM COMPONENTS AND SHALL NOT BE COPIED, REPRODUCED, DISCLOSED OR USED AS THE BASIS FOR MANUFACTURING OR SALE WITHOUT PERMISSION OF A DULY AUTHORIZED REPRESENTATIVE OF APDM COMPONENTS INC.



UNLESS OTHERWISE SPECIFIED
P.C. TOLERANCES ARE ±.002 [0.05]



SCHEMATIC

DATE	SYM	REVISION RECORD	DWN.	CK.
1/06	A	ECO # 526	CD	PD
5/08	B	ECO# 778	CD	PD

DESCRIPTION: SPST, NORMALLY OPEN, MOMENTARY, SURFACE MOUNT TACT SWITCH WITH LOCATING PINS

SPECIFICATIONS:
CONTACT RATING: 50mA @ 12VDC
INITIAL CONTACT RESISTANCE: 100MOHMS MAX.
INSULATION RESISTANCE: 100MOHMS MIN. @ 500VDC
DIELECTRIC STRENGTH: 100VAC FOR 1 MINUTE
ELECTRICAL LIFE: 200,000 CYCLES MIN.
OPERATING TEMPERATURE RANGE: -25°C to +70°C
STOP STRENGTH: MAX 3kgf VERTICAL STATIC LOAD
CONT. FOR 15 SEC.

ACTUATION FORCE: 160± 50gf
STORAGE TEMPERATURE RANGE: -30°C TO +80°C
SHOCK RESISTANCE: 50G PER METHOD 213B, MIL-STD-202F
VIBRATION RESISTANCE: PASSES METHOD 201A, MIL-STD-202F
SOLDERING:
IR REFLOW: 240°C MAX.
HAND SOLDERING: 350°C MAX. FOR 3 SECONDS MAX.
(30 WATT IRON MAX.)

MATERIALS:
BASE: LCP HIGH-TEMP THERMOPLASTIC UL94V-0
ACTUATOR: LCP HIGH-TEMP THERMOPLASTIC UL94V-0
COVER: STAINLESS STEEL
TERMINALS: SILVER PLATED BRASS
SHORTING CONTACT: STAINLESS STEEL WITH SILVER CLADDING
TAPE: TEFLON
ROHS COMPLIANT

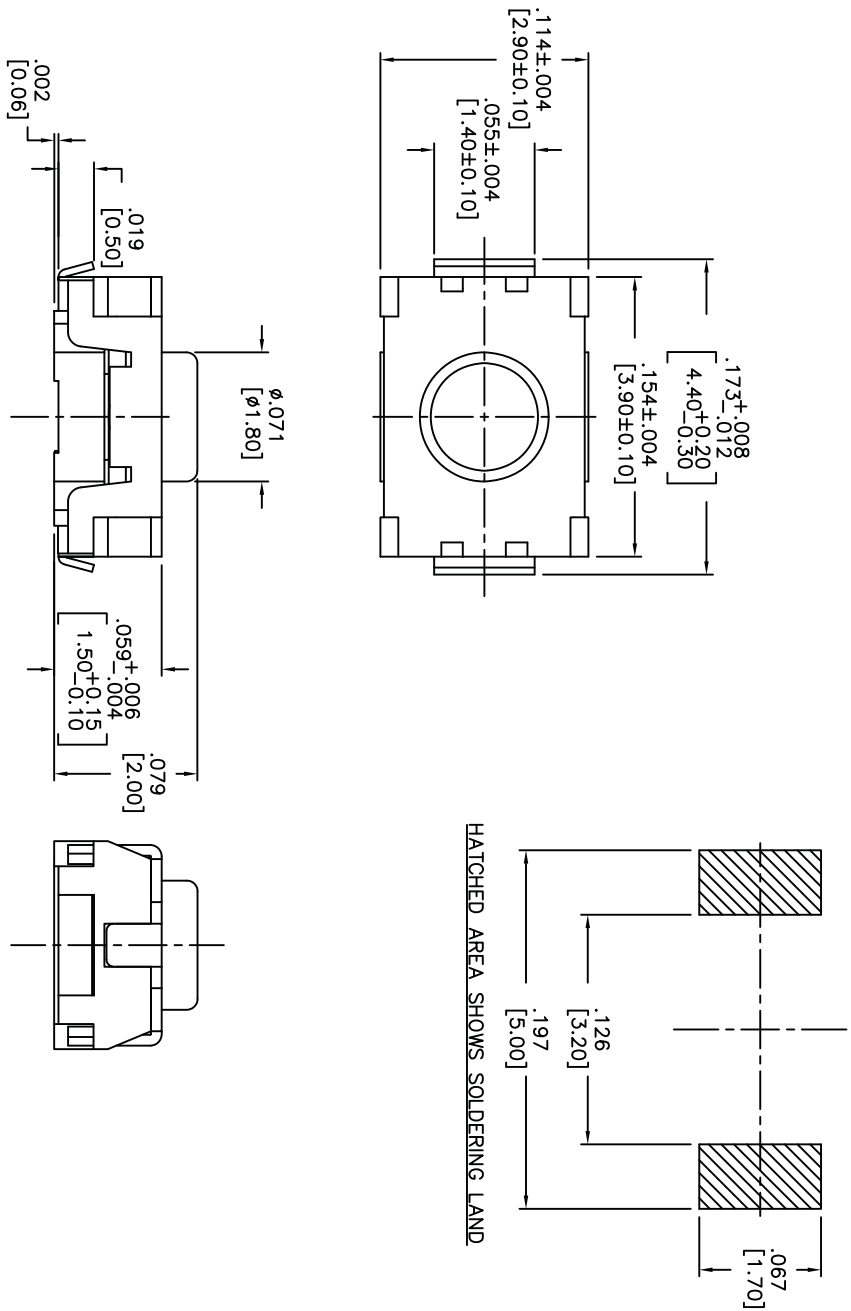
NOTE:
1. AFTER SOLDERING, RETURN SWITCHES TO NORMAL TEMPERATURE BEFORE WASHING.

DESIGNER'S INITIALS		DATE	
DIMENSION		SCALE	
TOLERANCES (UNLESS AS NOTED)		ANGLE = 40.5°	
.XX = ±.02 [0.5]		TITLE	
.XXX = ±.008 [0.20]		TACT SWITCH WITH	
.XXXX = ±.0008 [0.02]		LOCATING PINS	
APDM		DRAWING NO.	
63 Neck Rd. 01835		AMPTCFGP1VTR	
Haverhill, MA 01835		REV	
Tel: 978-372-3554		B	
Fax: 978-372-3554		REV	
APDM		REV	
P.D.		REV	

1 2 3 4 5 6 7 8

THIS DOCUMENT IS THE PROPERTY OF APDM COMPONENTS AND SHALL NOT BE COPIED, REPRODUCED, DISCLOSED OR USED AS THE BASIS FOR MANUFACTURING OR SALE WITHOUT PERMISSION OF A DULY AUTHORIZED REPRESENTATIVE OF APDM COMPONENTS INC.

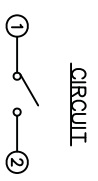
P.C.B. LAYOUT



HATCHED AREA SHOWS SOLDERING LAND

DATE	SYM	REVISION RECORD	DWNL	CK
1/06	A	ECO# 526	CD	PD
5/08	B	ECO# 778	CD	PD

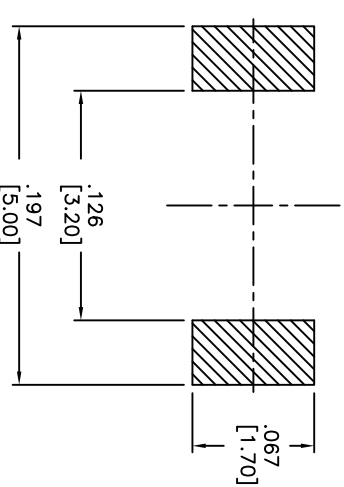
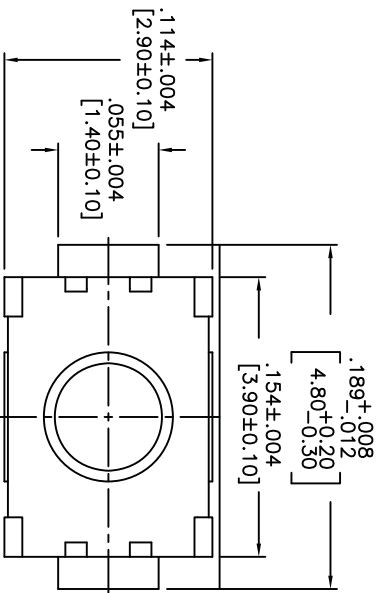
DESCRIPTION: VERTICAL PUSH MECHANICAL CONTACT SWITCH.
 SPECIFICATIONS:
 OPERATION FORCE: 220± 65gf
 OPERATION TEMP.: -25°C TO +70°C.
 STORAGE TEMP.: -30°C TO +80°C.
 ELECTRICAL LIFE: 200,000 CYCLES.
 RATING: 50mA, 12VDC.
 VIBRATION RESISTANCE: PASSES METHOD 201A
 MIL-STD-202F
 SHOCK RESISTANCE: 50G PER METHOD 213B
 MIL-STD-202F
 CONTACT RESISTANCE: 100mΩ MAX.
 INSULATION RESISTANCE: 100MΩ MIN. AT 100VDC.
 DIELECTRIC STRENGTH: 100VAC/1 MINUTE.
 CONTACT ARRANGEMENT: 1 POLE 1 THROW.
 MATERIALS:
 COVER: STAINLESS STEEL
 BASE: LCP HIGH-TEMP. THERMOPLASTIC.
 COLOR, WHITE.
 STEM: LCP HIGH-TEMP. THERMOPLASTIC.
 COLOR, BLACK.
 CONTACT DISK: STAINLESS STEEL WITH SILVER CLADDING
 TERMINAL: BRASS WITH SILVER PLATING
 TAPE & REEL PACKAGING, 2,000 PER REEL
 SOLDERING:
 HAND SOLDERING: 30 WATT IRON AT 320°C FOR 2 SECONDS
 IR REFLOW: 240°C MAX
 ROHS COMPLIANT
 LEAD FREE PROCESS COMPATIBLE



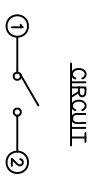
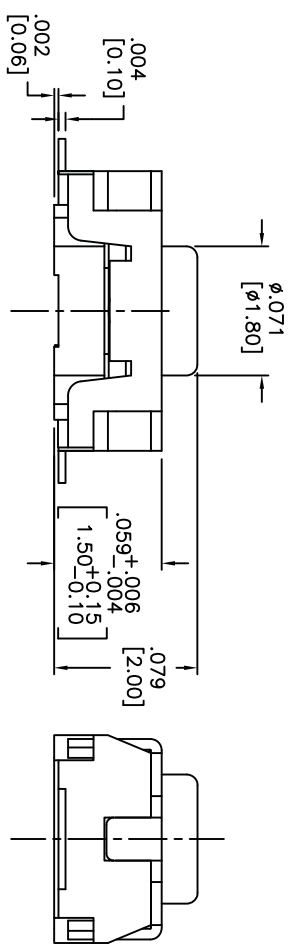
0A. INSPECT: DESIGNER'S CRITICAL DIMENSION		63 Neck Rd. 01835 Haverhill, MA Phone: 978-372-5554 Fax: 978-372-5554		DRN. CJD BR.
TOLERANCES (except as noted) .XX±.001[0.05] .XXX±.0008[0.20] .XXXX±.0008[0.02] ANGLE = 30.5°		SHEET 1 OF 1 SIZE B SCALE 15:1	THIRD ANGLE PROJECTION 	PJD
TITLE TACT SWITCH		DRAWING NO. AMPTLP2VTR		
DO NOT SCALE DATE 01/23/06		REV B		

THIS DOCUMENT IS THE PROPERTY OF APDM COMPONENTS AND SHALL NOT BE COPIED, REPRODUCED, DISCLOSED OR SALE WITHOUT PERMISSION OF A DULY AUTHORIZED REPRESENTATIVE OF APDM COMPONENTS INC.

P.C.B. LAYOUT



HATCHED AREA SHOWS SOLDERING LAND



CIRCUIT

DESCRIPTION: VERTICAL PUSH MECHANICAL CONTACT SWITCH.
 SPECIFICATIONS:
 OPERATION FORCE: 160± 50gf
 OPERATION TEMP.: -25°C TO +70°C.
 STORAGE TEMP.: -30°C TO +80°C.
 ELECTRICAL LIFE: 200,000 CYCLES.
 RATING: 50mA, 12VDC.
 VIBRATION RESISTANCE: PASSES METHOD 201A
 MIL-STD-202F
 SHOCK RESISTANCE: 50G PER METHOD 213B
 MIL-STD-202F
 CONTACT RESISTANCE: 100mΩ MAX.
 INSULATION RESISTANCE: 100MΩ MIN. AT 100VDC.
 DIELECTRIC STRENGTH: 100VAC/1 MINUTE.
 CONTACT ARRANGEMENT: 1 POLE 1 THROW.
 MATERIALS:
 COVER: STAINLESS STEEL
 BASE: LCP HIGH-TEMP. THERMOPLASTIC.
 COLOR, WHITE.
 STEM: LCP HIGH-TEMP. THERMOPLASTIC.
 COLOR, BLACK.
 CONTACT DISK: STAINLESS STEEL WITH SILVER CLADDING
 TERMINAL: BRASS WITH SILVER PLATING
 TAPE: TEFLON.
 TAPE & REEL PACKAGING, 2,000 PER REEL
 SOLDERING:
 HAND SOLDERING: 30 WATT IRON AT 320°C FOR 2 SECONDS
 IR REFLOW: 260°C MAX
 RoHS COMPLIANT
 LEAD FREE PROCESS COMPATIBLE

DATE	SYM	REVISION RECORD	DWN.	CK.
5/08	B	ECO# 778	CD	PD

Q.A. INSPECT:		DESIGNER'S INITIAL:		DIMENSION:		TOLERANCES (except as noted): .XX=±.02[0.5] .XXX=±.008[0.20] .XXXX=±.0008[0.02]		ANGLE = 30.5°	
DO NOT SCALE		DATE		DRAWING NO.		REV			
01/23/06		AMPTFP2VTR		B					

63 Neck Rd. Haverhill, MA 01830 Tel: 978-372-5554 Fax: 978-372-5554	APDM APDM COMPONENTS INC.	PH: CJD BR: PJD
INCH	SHEET 1 OF 1	SIZE B
SCALE 15:1	THIRD ANGLE PROJECTION	ANGLE
TITLE TACT SWITCH		