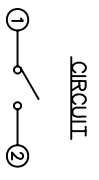
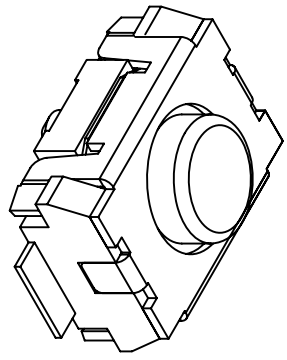
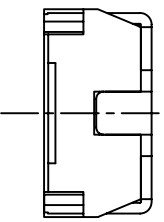
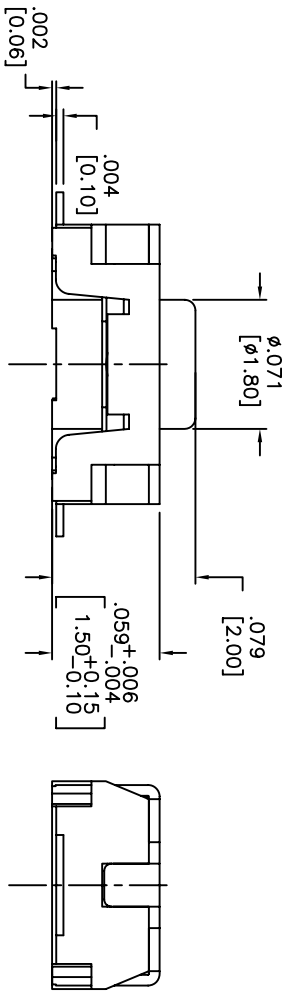
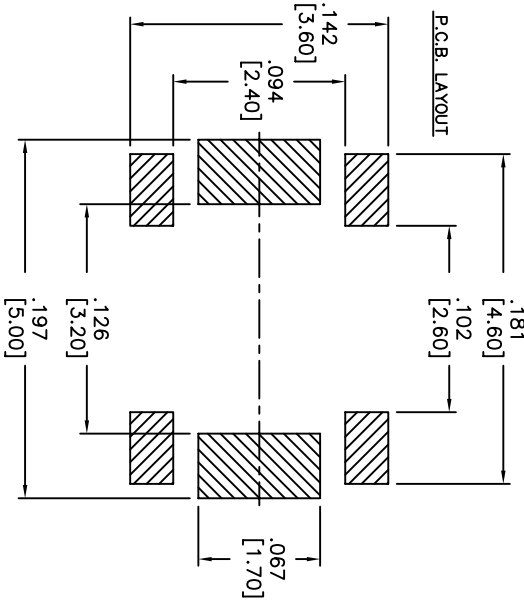
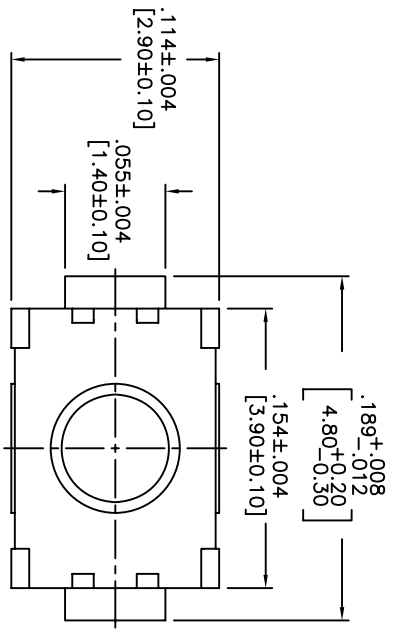


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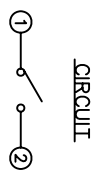
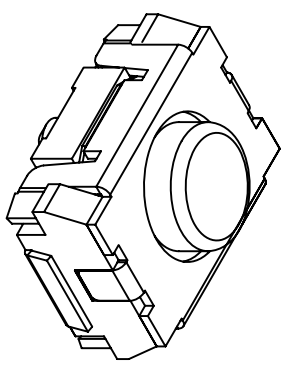
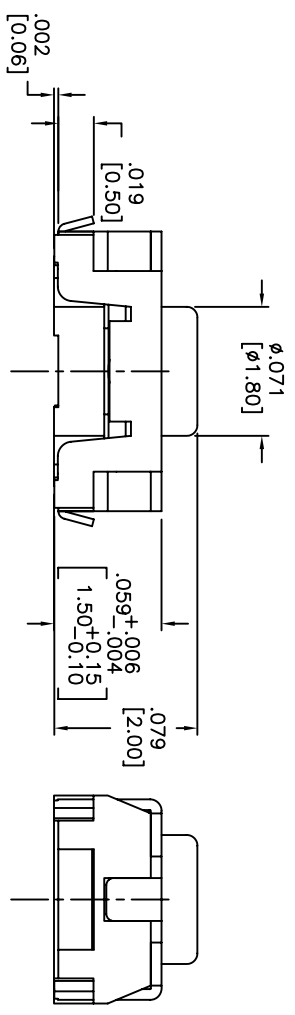
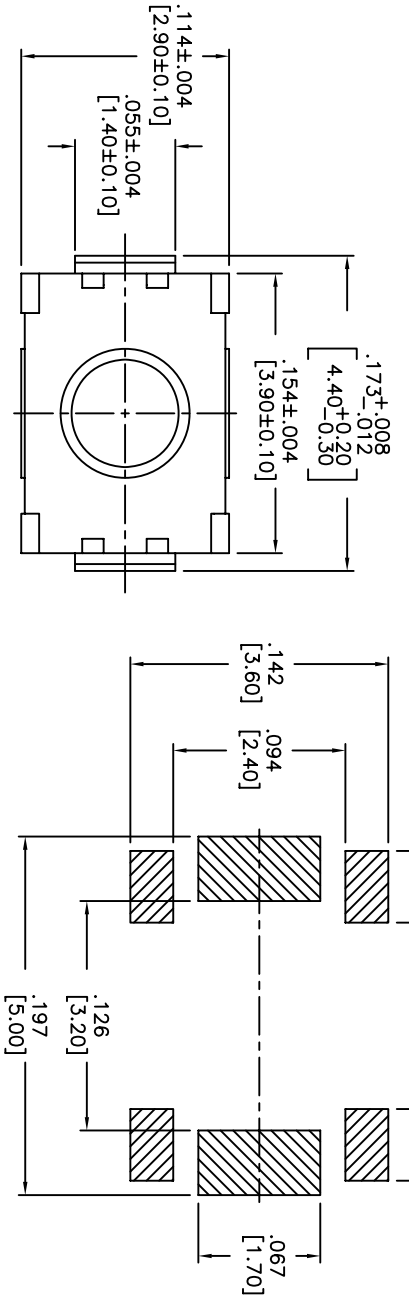
DATE	SYM	REVISION RECORD	DWN.	CK.
5/08	B	ECO# 778	CD	PD

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
 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: 		63 Neck Rd. Merrimack, MA 01855 Telephone: 978-372-5554 Fax: 978-372-5554	DRN. CJD BR: BR ORK: PJD
DESIGNER: CRITICAL DIMENSION TOLERANCES (except as noted) .XX±.02[0.5] .XXX±.008[0.20] .XXXX±.0008[0.02] ANGLE = 30.5°	SHEET 1 OF 1 SIZE B SCALE 15:1 THIRD ANGLE PROJECTION	TITLE VERTICAL PUSH TACT SWITCH	DATE 2/4/08 DRAWING NO. AMPPTFGP2VTR REV B

1 2 3 4 5 6 7 8

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

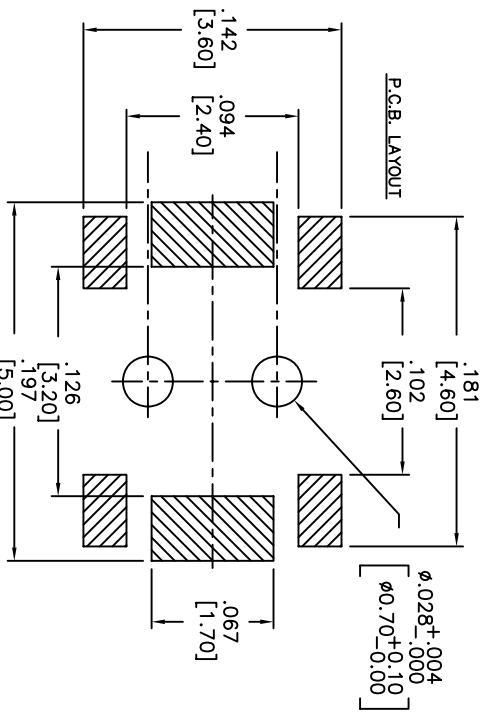
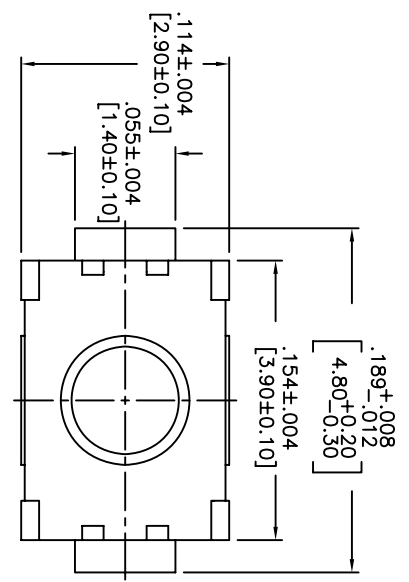
DESCRIPTION: VERTICAL PUSH MECHANICAL CONTACT SWITCH.
 SPECIFICATIONS:
 OPERATION FORCE: 160± 50gf
 OPERATION TEMP.: -25°C TO +70°C.
 STORAGE TEMP.: -30°C TO +80°C.
 ELECTRICAL LIFE: 100,000 CYCLES.
 RATING: 50mA, 12VDC.
 VIBRATION RESISTANCE: PASSES METHOD 201A MIL-STD-202F
 SHOCK RESISTANCE: 50G PER 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: Δ INSPECT DESIGNER'S CRITICAL DIMENSION		APDM APDM COMPONENTS INC. 63 Nork Rd. Hawthorn Hill, VA 01835 Phone: 781-372-3534		PRN: CJD BR: PJD	
TOLERANCES (UNLESS OTHERWISE SPECIFIED) .XX = ±.02(0.5) .XXX = ±.008(0.20) .XXXX = ±.0008(0.02) ANGLE = 40.5°		TITLE VERTICAL PUSH TACT SWITCH		THIRD ANGLE PROJECTION	
DO NOT SCALE DRAWING		DATE: 2/4/08		DRAWING NO: AMPPTLGP2VTR	
				REV: B	

1 2 3 4 5 6 7 8

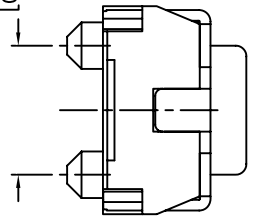
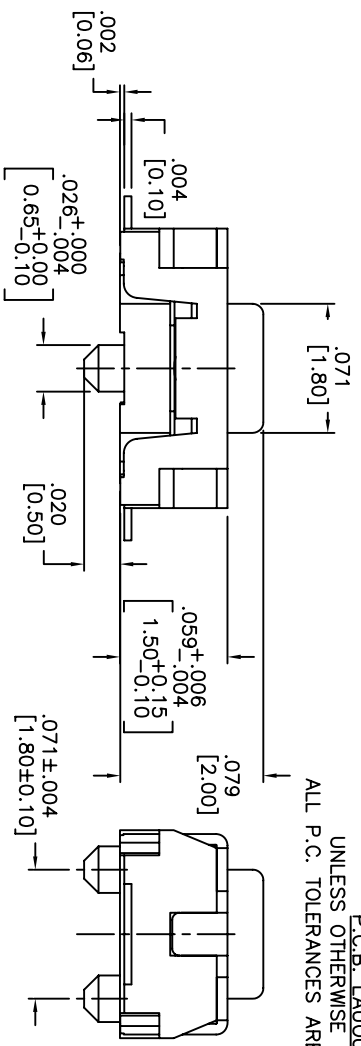
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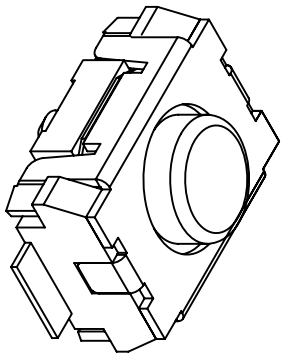


HATCHED AREA SHOWS SOLDERING LAND

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:

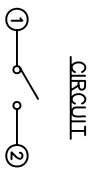
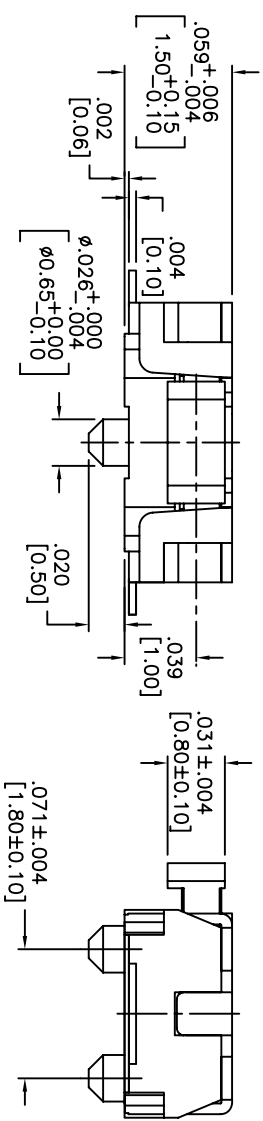
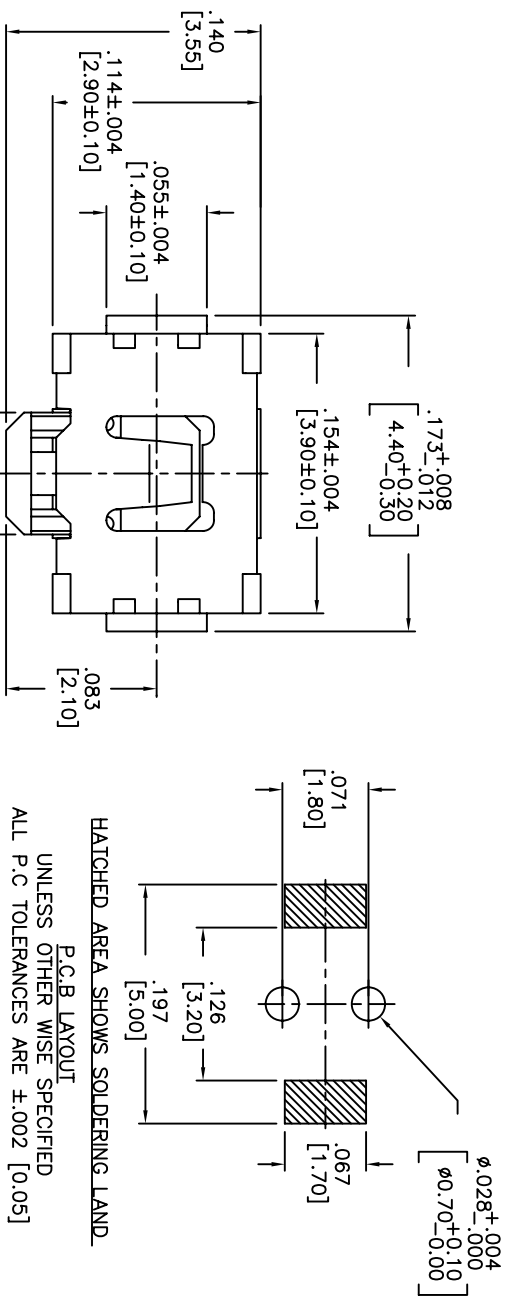
OPERATION FORCE: 160± 50gf
 OPERATION TEMP.: -25°C TO +70°C.
 STORAGE TEMP.: -30°C TO +80°C.
 ELECTRICAL LIFE: 200,000 CYCLES.
 RATING: 50ma, 12VDC.
 VIBRATION RESISTANCE: PASSES METHOD 201A
 MIL-STD-202F
 SHOCK RESISTANCE: 50G PER METHOD 213B
 MIL-STD-202F
 CONTACT RESISTANCE: 100mΩ MAX.
 INSULATION 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. Troy, MI 48065 Phone: 313-772-5554 Fax: 313-772-5554	DRN. CJD
TOLERANCES (unless as noted) .XX± = ±0.001 [0.25] .XXX± = ±0.0008 [0.20] .XXXX± = ±0.0008 [0.02] ANGLE = 30.5°	INCH SHEET 1 OF 1	SIZE B	SCALE 15:1	THIRD ANGLE PROJECTION
DATE: 6/30/05	DRAWING NO. AMPTCFGP2VTR		REV. B	

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

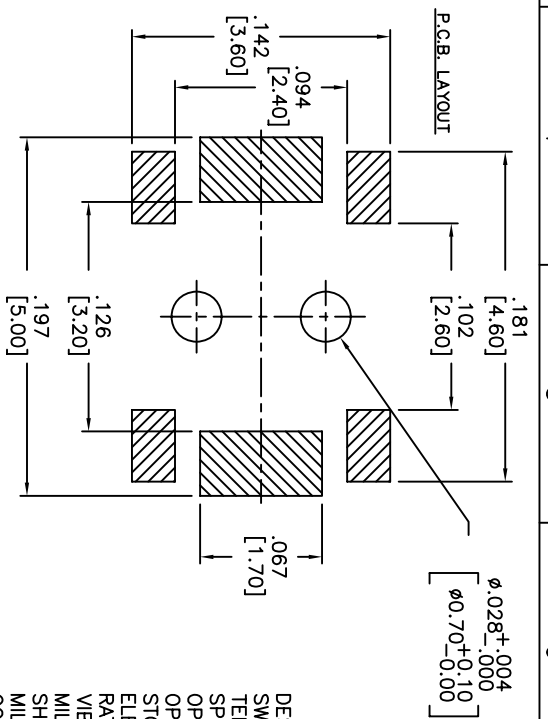
DESCRIPTION: SIDE PUSH MECHANICAL CONTACT SWITCH.
 SPECIFICATIONS:
 OPERATION FORCE: 220± 65gf
 STROKE: 0.2±0.10mm
 OPERATION TEMP.: -25°C TO +70°C.
 STORAGE TEMP.: -30°C TO +80°C.
 ELECTRICAL LIFE: 100,000 CYCLES.
 RATING: 50mA, 12VDC.
 CONTACT RESISTANCE: 100mΩ MAX.
 INSULATION RESISTANCE: 100MΩ MIN. 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		DIM.		P.D.	
TOLERANCES (UNLESS OTHERWISE SPECIFIED)		SCALE		THIRD ANGLE PROJECTION	
.XX±.XX(X)		15:1		—	
.XXX±.XXX(X)		15:1		—	
ANGLE = 30.5°					
TITLE		DRAWING NO.		REV.	
TACT SWITCH		AMPTCFVTR		B	
DATE		DRAWING NO.		REV.	
5/2/06		AMPTCFVTR		B	

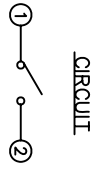
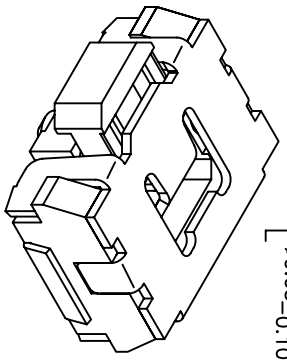
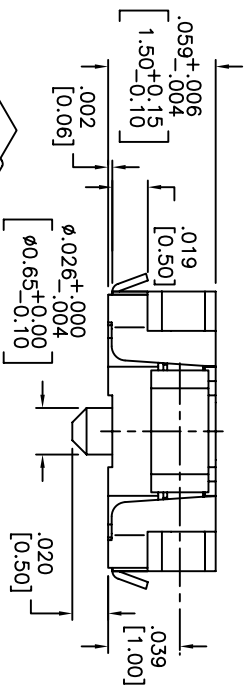
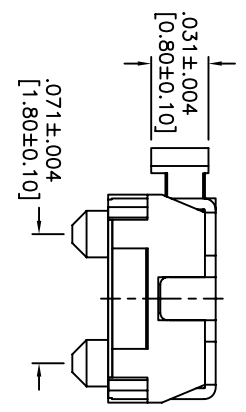
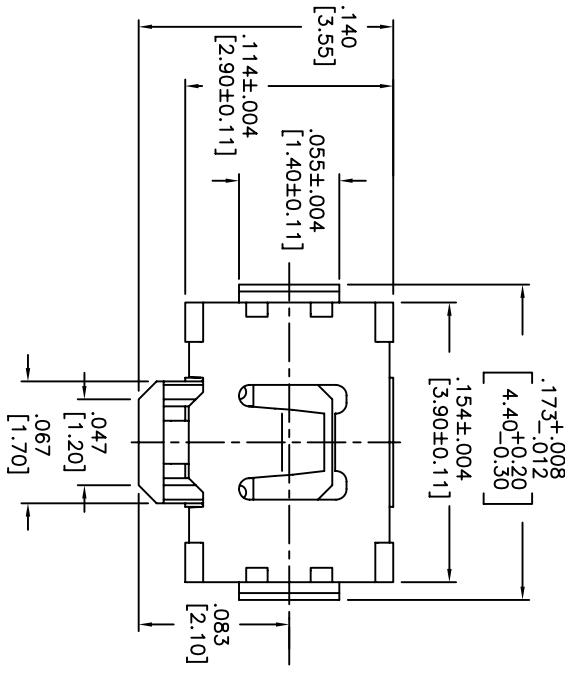
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DATE	SYM	REVISION RECORD	DWNL	CK
1/06	B	ECO# 526	CD	PD
5/08	C	ECO# 778	CD	PD



HATCHED AREA SHOWS SOLDERING LAND



DESCRIPTION: SIDE PUSH MECHANICAL CONTACT SWITCH, WITH BENDING AND GROUNDING TERMINALS.

SPECIFICATIONS:

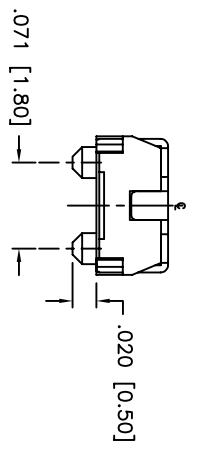
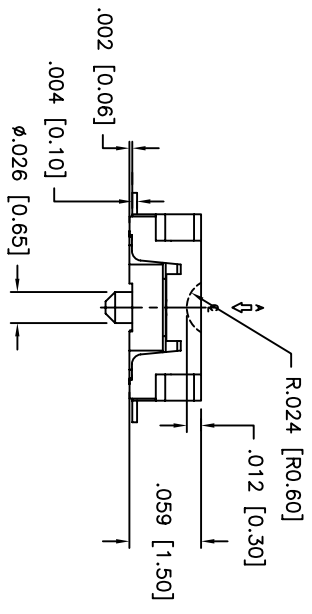
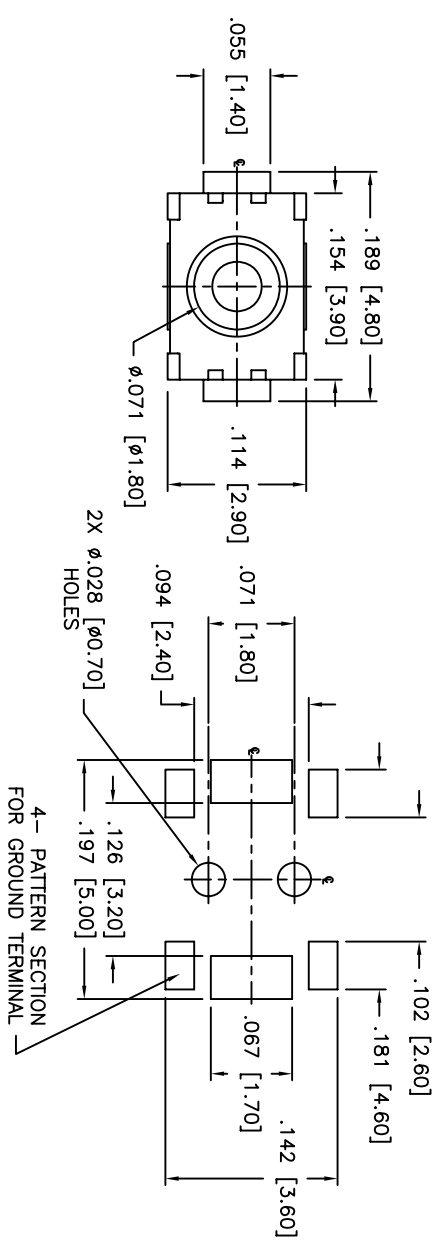
- OPERATION FORCE: 220± 65gf
- OPERATION TEMP.: -25°C TO +70°C.
- STORAGE TEMP.: -30°C TO +80°C.
- ELECTRICAL LIFE: 100,000 CYCLES.
- RATING: 50mA, 12VDC.
- VIBRATION RESISTANCE: PASSES METHOD 201A MIL-STD-202F
- SHOCK RESISTANCE: 50G PER METHOD 213B MIL-STD-202F
- CONTACT RESISTANCE: 100MΩ MAX.
- INSULATION RESISTANCE: 100MΩ MIN. AT 100VDC.
- DIELECTRIC STRENGTH: 100VAC/1 MINUTE.
- CONTACT ARRANGEMENT: 1 POLE 1 THROW.
- STROKE: .008 ±.002 [0.2 ±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, 3500 PER REEL
- HAND SOLDERING: 30 WATT IRON AT 320°C FOR 2 SECONDS
- IR REFLOW: 240°C MAX
- ROHS COMPLIANT

<p>DESIGNATES CRITICAL DIMENSION</p> <p>TOLERANCES (UNLESS OTHERWISE SPECIFIED)</p> <p>.XX± = ±0.015</p> <p>.XXX = ±0.008 [0.20]</p> <p>.XXXX = ±0.0008 [0.02]</p> <p>ANGLE = 30.5°</p>		<p>9A. INSPECT</p> <p>APDM</p> <p>63 Neck Rd. 01835 Holliston, MA Tel: 508-372-5554 Fax: 508-372-5554</p>	<p>DRN. CJD</p> <p>BR. OKR.</p> <p>PJD</p>
<p>DATE: 06/30/05</p> <p>DRAWING NO. AMPPTCLGVTR</p>	<p>SHEET 1 OF 1</p> <p>SIZE B</p> <p>SCALE 15:1</p>	<p>TITLE TACT SWITCH</p>	<p>THIRD ANGLE PROJECTION</p>

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

P.C. LAYOUT

4- PATTERN SECTION
FOR GROUND TERMINAL

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.

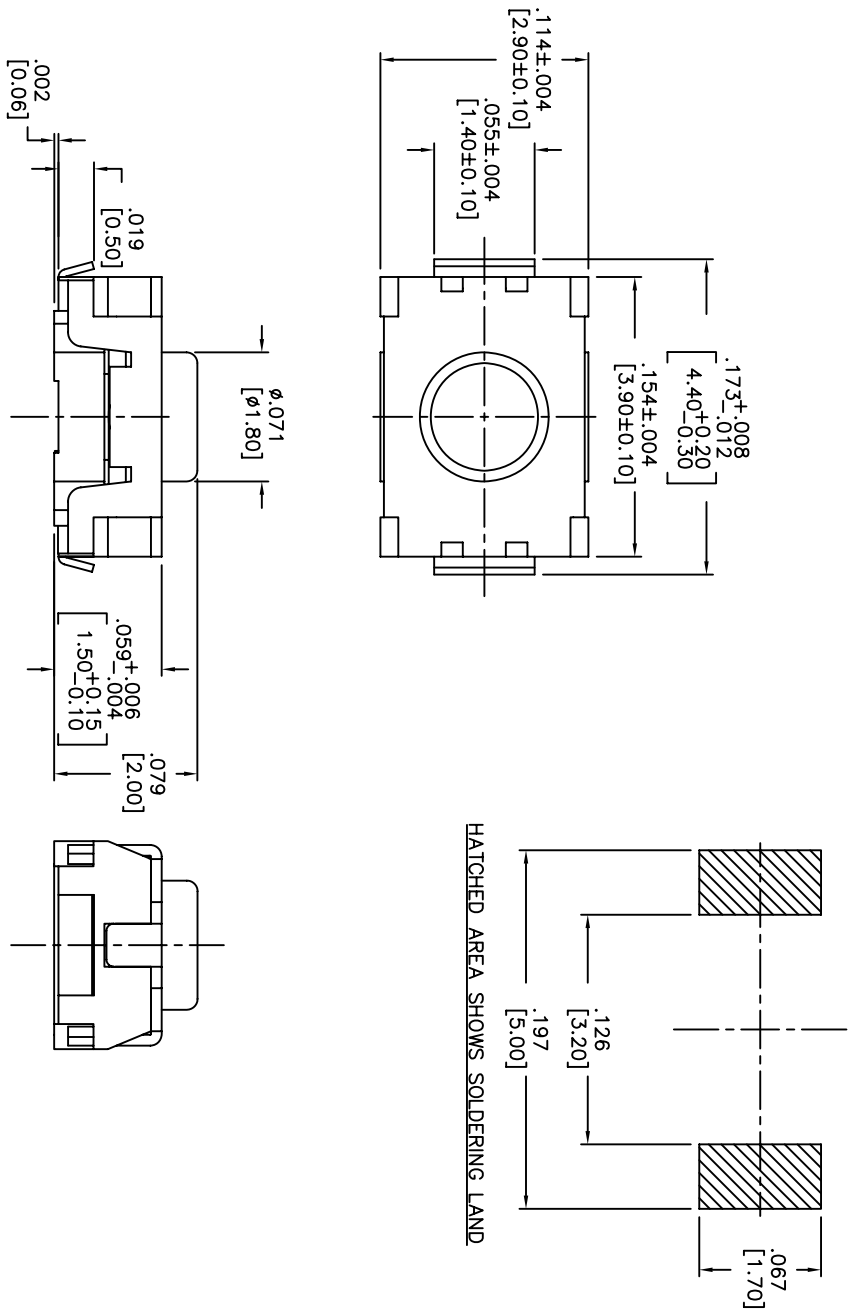


SCHEMATIC

Q.A. INSECT: 		DESIGNER'S INITIAL DIMENSION		APDM APDM COMPONENTS INC. 63 NEXUS RD. HENDERILL, MA 01835 TEL: 978-372-5554 FAX: 978-372-5554		PRN. CJD BR: PJD BR: PJD	
TOLERANCES (UNLESS AS NOTED) .XX = ±.02 [0.5] .XXX = ±.008 [0.20] .XXXX = ±.0008 [0.02] ANGLE = 30.5°		TITLE TACT SWITCH WITH LOCATING PINS		THIRD ANGLE PROJECTION 		REV B	
DO NOT SCALE DRAWING NO. AMPTCFGP1VTR		DATE 07/20/05		DRAWING NO. AMPTCFGP1VTR		REV B	

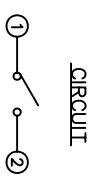
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P.C.B. LAYOUT



DATE	SYM	REVISION RECORD	DWN.	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

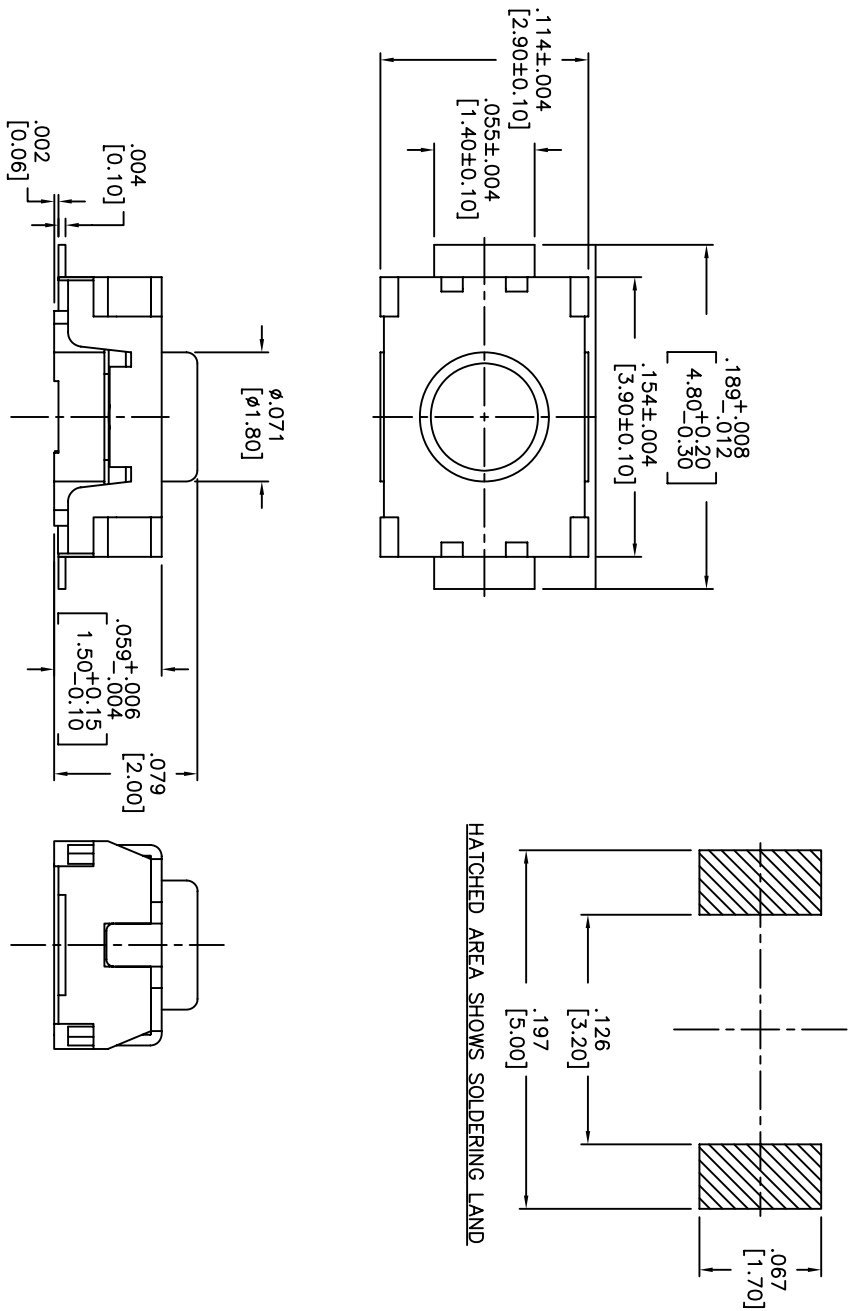


Q.A. INSPECT:		DESIGNER'S INITIAL:		DIMENSION:		TOLERANCES (UNLESS AS NOTED)		ANGLE = 40.5°	
APDM		63 Neck Rd.		01835		10000-4-0008[0.20]		15:1	
TITLE		SHEET		SCALE		THIRD ANGLE PROJECTION		REV	
TACT SWITCH		1 OF 1		15:1		PJD		B	
DATE		DRAWING NO.		REV		DO NOT SCALE DRAWING			
01/23/06		AMPTLP2VTR		B					

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P.C.B. LAYOUT



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: 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.

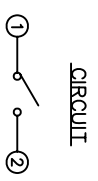
MATERIALS:

- 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



Q.A. INSPECT:		DESIGNATES CRITICAL DIMENSION		APDM		63 Neck Rd. 01835 Haverhill, MA Phone: 978-372-5554 Fax: 978-372-5554		DRN. CJD	
TOLEANCES (except as noted)		.XX = ±0.005 [0.15]		.XXX = ±0.008 [0.20]		.XXXX = ±0.008 [0.20]		THIRD ANGLE PROJECTION	
ANGLE = 30.5°		DO NOT SCALE		DATE: 01/23/06		DRAWING NO. AMPTFP2VTR		REV. B	
TITLE: TACT SWITCH		SHEET: 1 OF 1		SIZE: B		SCALE: 15:1		DR: PJD	

1 2 3 4 5 6 7 8