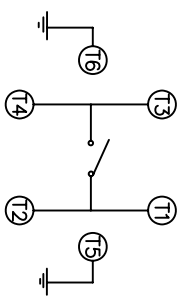
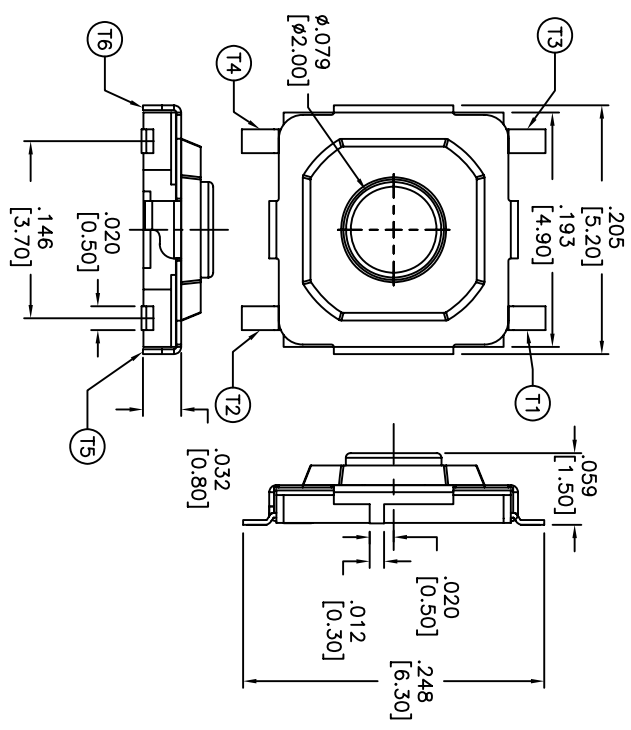
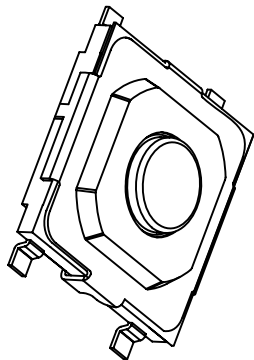
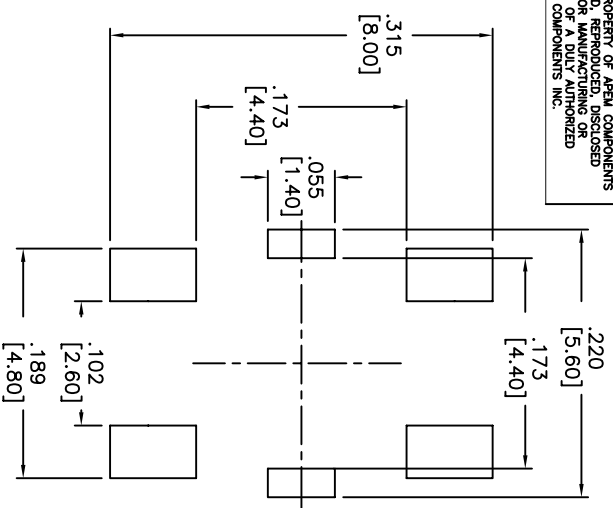


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ATMG53\*V\*  
 OPERATION FORCE: \_\_\_\_\_  
 3=160gf  
 4=260gf  
 PACKAGE STYLE:  
 T/R=TAPE AND REEL  
 LEAD FREE



CIRCUIT DIAGRAM

DATE	SYM	REVISION RECORD	DWN.	CK.
11/05	B	ECO# 495	CD	

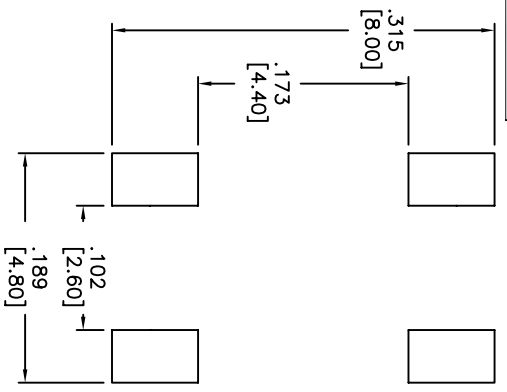
DESCRIPTION: MINIATURE MACHANICAL CONTACT SWITCH WITH SURFACE MOUNT TERMINALS AND GROUNDING TERMINALS.  
 SPECIFICATIONS:  
 STROKE: .010 <sup>+0.004</sup> <sub>-0.008</sub> [0.25 <sup>+0.10</sup> <sub>-0.20</sub>]  
 OPERATION TEMPERATURE RANGE: -25°C TO +70°C  
 STORAGE TEMPERATURE RANGE: -30°C TO +80°C  
 VIBRATION TEST: PASSES METHOD 201A MIL-STD-202F.  
 SHOCK TEST: 50G PER METHOD 213B MIL-STD202F.  
 ELECTRICAL LIFE: 1,000,000 CYCLES MIN FOR 160gf.  
 200,000 CYCLES MIN FOR 260gf.  
 RATING: 50mA, 12VDC.  
 CONTACT RESISTANCE: 100mΩ MAX.  
 INSULATION RESISTANCE: 100MΩ MIN. AT 500VDC.  
 DIELECTRIC STRENGTH: 250VAC/1 MINUTE.  
 CONTACT ARRANGEMENT: 1POLE 1 THROW.  
 MATERIALS:  
 COVER: NICKEL SILVER.  
 BASE: HIGH-TEMP. THERMOPLASTIC.  
 COLOR: BLACK.  
 STEM: BRASS WITH NICKEL PLATING  
 CONTACT DISC: STAINLESS STEEL.  
 TERMINAL: BRASS WITH SILVER CLADDING.  
 TAPE: TEFLON  
 SOLDERING:  
 HAND SOLDERING: 30 WATT IRON AT 350°C FOR 5 SEC.  
 VAPOR & REFLOW: 255°C FOR 5 SEC. MAX.  
 NON-WASHABLE  
 LEAD FREE PROCESS COMPATIBLE  
 ROHS COMPLIANT

<b>APDM</b> APDM COMPONENTS, INC. 63 Nork Rd. Torrington, CT 06875 Phone: 860-772-5554 Fax: 860-772-5554		DPN: CJD BR: PJD
DESIGNS: OPTICAL DIMENSION TOLERANCES (UNLESS AS NOTED) .XX = ±0.005 .XXX = ±0.004 [0.20] .XXXX = ±0.0008 [0.02] ANGLE = 30.5°	SHEET 1 OF 1 SIZE B SCALE 10:1 THIRD ANGLE PROJECTION	TITLE <b>MECHANICAL CONTACT SWITCH</b>
DO NOT SCALE DRAWING NO. ATMG53*V* DATE 08/15/05	REV B	

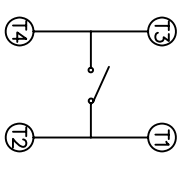
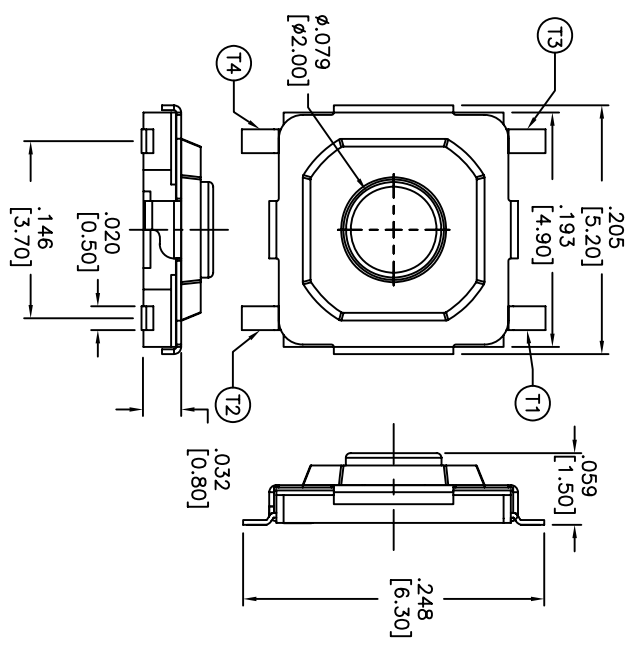
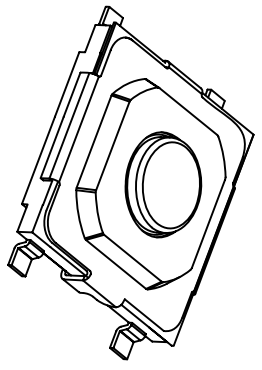
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OPERATION FORCE: ATM53\*V\*  
 2=100gf  
 3=160gf  
 4=260gf

PACKAGE STYLE:  
 T/R=TAPE AND REEL  
 LEAD FREE



P.C.B. LAYOUT



CIRCUIT DIAGRAM

DATE	SYM	REVISION RECORD	DWN.	CK.

DESCRIPTION: MINIATURE MECHANICAL CONTACT SWITCH SURFACE MOUNT TERMINALS.

SPECIFICATIONS:

STROKE: .010  $\pm$  .004  $\pm$  .006  $\pm$  .001

OPERATION TEMPERATURE RANGE: -25°C TO +70°C

STORAGE TEMPERATURE RANGE: -30°C TO +80°C

VIBRATION TEST: PASSES METHOD 201A MIL-STD-202F.

SHOCK TEST: 50G PER METHOD 213B MIL-STD202F.

ELECTRICAL LIFE: 1,000,000 CYCLES MIN FOR 100gf, 16 200,000 CYCLES MIN FOR 260gf.

RATING: 50mA, 12VDC.

CONTACT RESISTANCE: 100mΩ MAX.

INSULATION RESISTANCE: 100MΩ MIN. AT 500VDC.

DIELECTRIC STRENGTH: 250VAC/1 MINUTE.

CONTACT ARRANGEMENT: 1POLE 1 THROW.

MATERIALS:

COVER: NICKEL SILVER.

BASE: HIGH-TEMP. THERMOPLASTIC.

COLOR: BLACK.

STEM: BRASS WITH NICKEL PLATING

CONTACT DISC: STAINLESS STEEL WITH SILVER PLATING.

TERMINAL: BRASS WITH SILVER CLADDING.

TAPE: TEFLON

SOLDERING:

HAND SOLDERING: 30 WATT IRON AT 350°C FOR 5 SEC VAPOR & REFLOW: 255°C FOR 5 SEC. MAX.

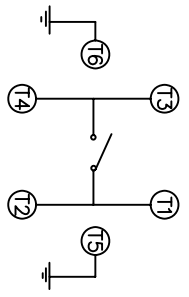
NON-WASHABLE

LEAD FREE PROCESS COMPATIBLE

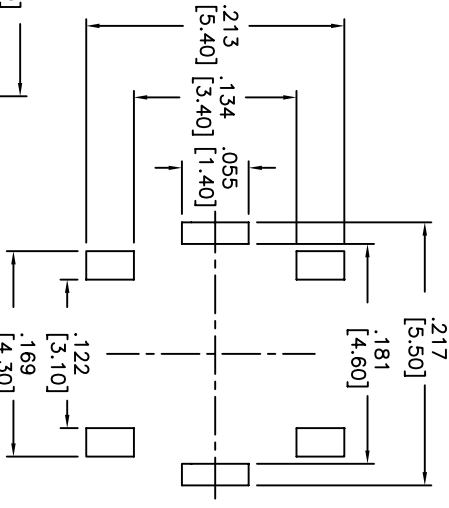
ROHS COMPLIANT

<b>Q.A. INSPECT:</b> 		<b>DESIGNER'S OPTICAL DIMENSION</b> <small>(DRAWN AS SHOWN)</small> .XX=±.02[0.05] .XXX=±.008[0.20] .XXXX=±.0008[0.02] ANGLE = 30.5°		 <b>APEM</b> <small>APERM COMPONENTS, INC.</small> 63 NACK RD. HERRINGHAM, MA 01835 TEL: 978-372-5554 FAX: 978-372-5554		PPN: CJD BR: PJD	
<b>TOLERANCES</b> <small>(DRAWN AS SHOWN)</small> .XX=±.02[0.05] .XXX=±.008[0.20] .XXXX=±.0008[0.02] ANGLE = 30.5°		<b>TITLE</b> MECHANICAL CONTACT SWITCH		SHEET 1 OF 1 SIZE B SCALE 10:1 THIRD ANGLE PROJECTION		DO NOT SCALE DATE 4/26/06 DRAWING NO. ATM53*V* REV A	

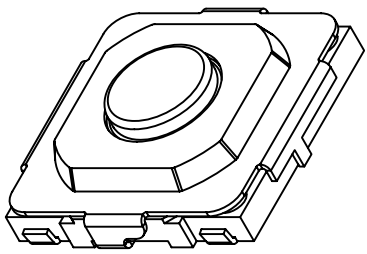
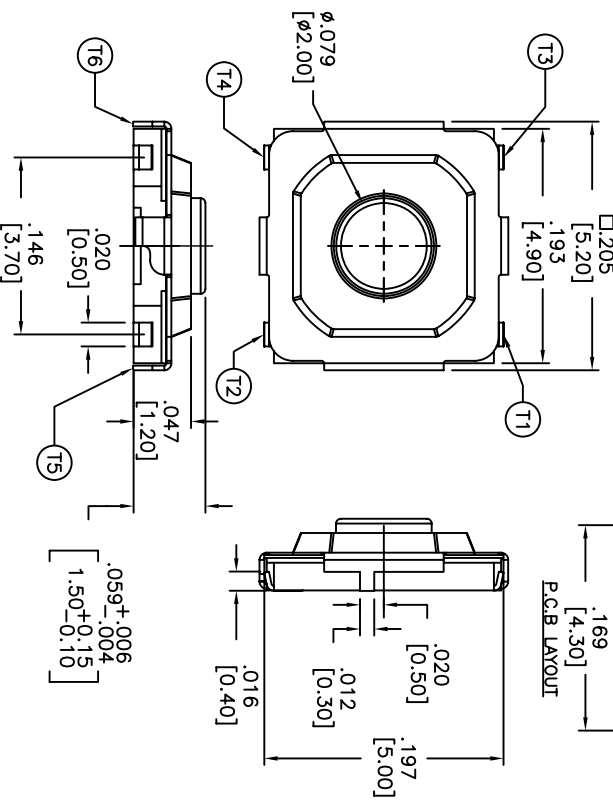
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CIRCUIT DIAGRAM



PCB LAYOUT



OPERATION FORCE: ATUG53\*\*V\* PACKAGE STYLE: T/R=TAPE AND REEL  
 3=160gf LEAD FREE  
 4=260gf

DESCRIPTION: MINIATURE MECHANICAL CONTACT SWITCH WITH "S" TYPE SMT AND GROUNDING TERMINALS.

SPECIFICATIONS:

OPERATION TEMPERATURE RANGE: -25°C TO +70°C  
 STORAGE TEMPERATURE RANGE: -30°C TO +80°C  
 VIBRATION TEST: PASSES METHOD 201A  
 MIL-STD-202F.  
 SHOCK TEST: 50G PER METHOD 213B MIL-STD202F.  
 ELECTRICAL LIFE: 1,000,000 CYCLES MIN FOR 160gf.  
 200,000 CYCLES MIN FOR 260gf.

RATING: 50mA, 12VDC.  
 CONTACT RESISTANCE: 100mΩ MAX.  
 INSULATION RESISTANCE: 100MΩ MIN. AT 500VDC.  
 DIELECTRIC STRENGTH: 250VAC/1 MINUTE.  
 STROKE: 0.25 ±0.10mm  
 CONTACT ARRANGEMENT: 1POLE 1 THROW.

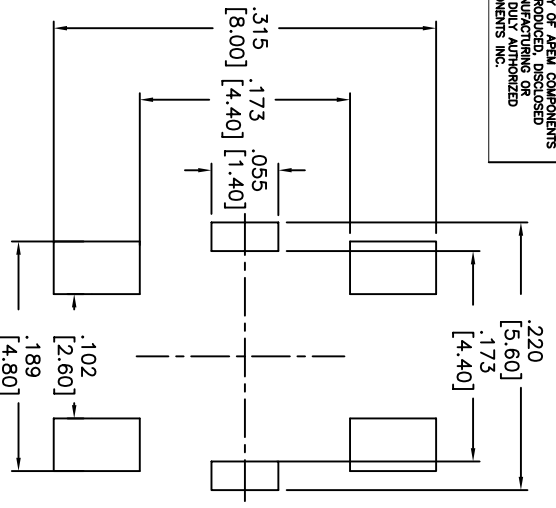
MATERIALS:  
 COVER: NICKEL SILVER.  
 BASE: HIGH-TEMP. THERMOPLASTIC.  
 COLOR: BLACK.  
 STEM: BRASS WITH NICKEL PLATING  
 CONTACT DISC: STAINLESS STEEL.  
 TERMINAL: BRASS WITH SILVER CLADDING.  
 TAPE: TEFLON

SOLDERING:  
 HAND SOLDERING: 30 WATT IRON AT 350°C FOR 5 SEC.  
 IR REFLOW: 225°C MAX.  
 LEAD FREE PROCESS COMPATIBLE  
 ROHS COMPLIANT

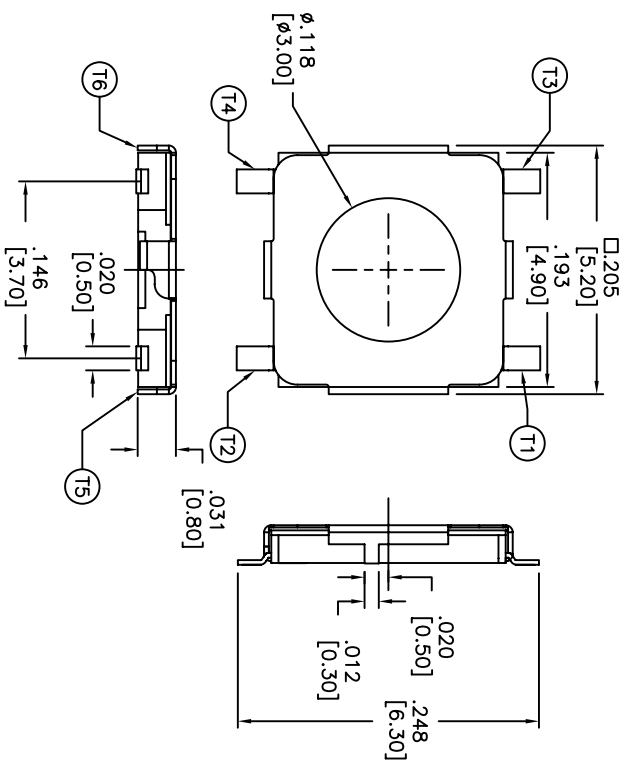
DATE	SYM	REVISION RECORD	DWN.	CK.

<b>Q.A. INSPECT:</b> 		<b>DESIGNER'S INITIAL:</b> DIMENSION		<b>DRN. CJD</b>	
<b>TOLERANCES</b> (UNLESS AS NOTED) .XX=±0.05 .XXX=±0.008(0.20) .XXXX=±0.0008(0.02) ANGLE = 30.5°		<b>APM</b> 63 Neck Rd. Haverhill, MA 01830 Tel: 978-372-5554 Fax: 978-372-5554		<b>BR. BR. PJD</b>	
<b>TITLE</b> MECHANICAL CONTACT SWITCH		<b>SHEET</b> 1 OF 1		<b>SCALE</b> 10:1	
<b>DATE</b> 8/11/05		<b>DRAWING NO.</b> ATUG53*V*		<b>REV</b> A	

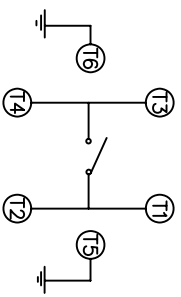
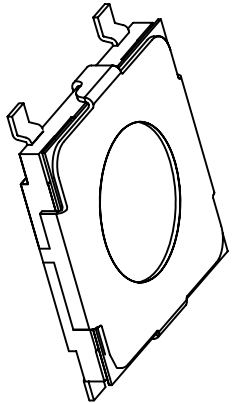
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P.C.B. LAYOUT  
UNLESS OTHERWISE SPECIFIED  
ALL P.C. TOLERANCES ARE ±.002 [0.05]



ATMG52\*V\*  
OPERATION FORCE: \_\_\_\_\_  
2=100gf  
3=160gf  
4=260gf  
PACKAGE STYLE:  
T/R=TAPE AND REEL  
LEAD FREE



CIRCUIT DIAGRAM

DESCRIPTION: MINIATURE MECHANICAL CONTACT SWITCH WITH SMT, AND GROUNDING TERMINALS.

SPECIFICATIONS:

OPERATION TEMPERATURE RANGE: -25°C TO +70°C

STORAGE TEMPERATURE RANGE: -30°C TO +80°C

VIBRATION TEST: PASSES METHOD 2014 MIL-STD-202F.

SHOCK TEST: 50G PER METHOD 213B MIL-STD202F.

ELECTRICAL LIFE: 1,000,000 CYCLES MIN FOR 100gf AND 160gf.  
200,000 CYCLES MIN FOR 260gf.

RATING: 50mA, 12VDC.

CONTACT RESISTANCE: 100mΩ MAX.

INSULATION RESISTANCE: 100MΩ MIN. AT 500VDC.

DIELECTRIC STRENGTH: 250VAC/1 MINUTE.

CONTACT ARRANGEMENT: 1POLE 1 THROW.

MATERIALS:

COVER: NICKEL SILVER.

BASE: HIGH-TEMP. THERMOPLASTIC.

COLOR, BLACK.

STEM: BRASS WITH NICKEL PLATING

CONTACT DISC: STAINLESS STEEL WITH SILVER CLADDING.

TERMINAL: BRASS WITH SILVER PLATING.

TAPE: TEFLON

SOLDERING:

HAND SOLDERING: 30 WATT IRON AT 350°C FOR 5 SEC.

IR REFLOW: 260°C MAX

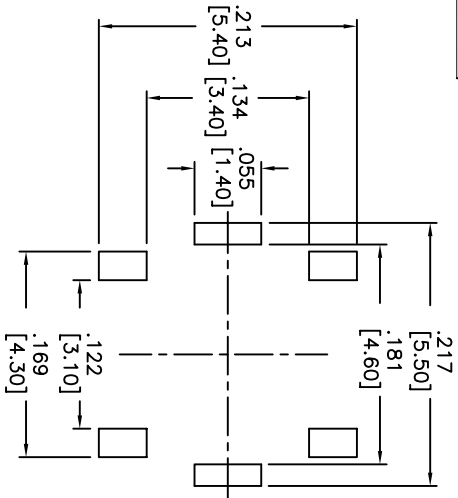
LEAD FREE PROCESS COMPATIBLE

ROHS COMPLIANT

DATE	SYM	REVISION RECORD	DWN.	CK.

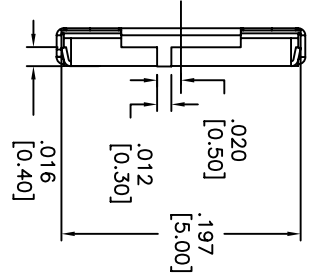
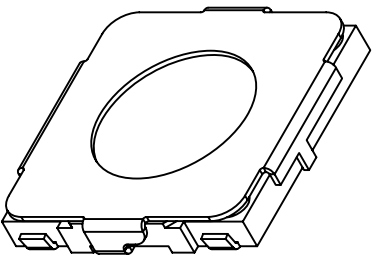
<b>Q.A. INSPECT:</b> 		<b>DESIGNER'S INITIAL:</b> _____		<b>DRN.</b> CJD
<b>TOLERANCES (UNLESS OTHERWISE SPECIFIED)</b> .XX=±.02[0.05] .XXX=±.0008[0.20] .XXXX=±.0008[0.20] ANGLE = 40.5°		<b>APM</b> APM COMPONENTS INC. 63 NACK RD. THORNTON, MA 01559 TEL: 508-772-5554 FAX: 508-772-5554		<b>BR.</b> PJD
<b>TITLE</b> MECHANICAL CONTACT SWITCH	<b>SHEET</b> 1 OF 1	<b>SIZE</b> B	<b>SCALE</b> 10:1	<b>THIRD ANGLE PROJECTION</b> 
<b>DATE</b> 8/15/05	<b>DRAWING NO.</b> ATMG52*V*	<b>REV</b> A		

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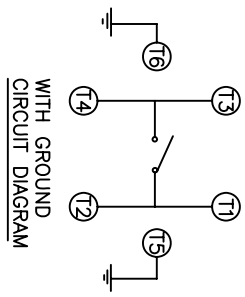


OPERATION FORCE: ATUG52\*\*V\*  
 2=100gf  
 3=160gf  
 4=260gf

PACKAGE STYLE:  
 T/R=TAPE AND REEL  
 LEAD FREE



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



DESCRIPTION: MINIATURE MECHANICAL CONTACT SWITCH WITH J TYPE SMT AND GROUNDING TERMINALS.

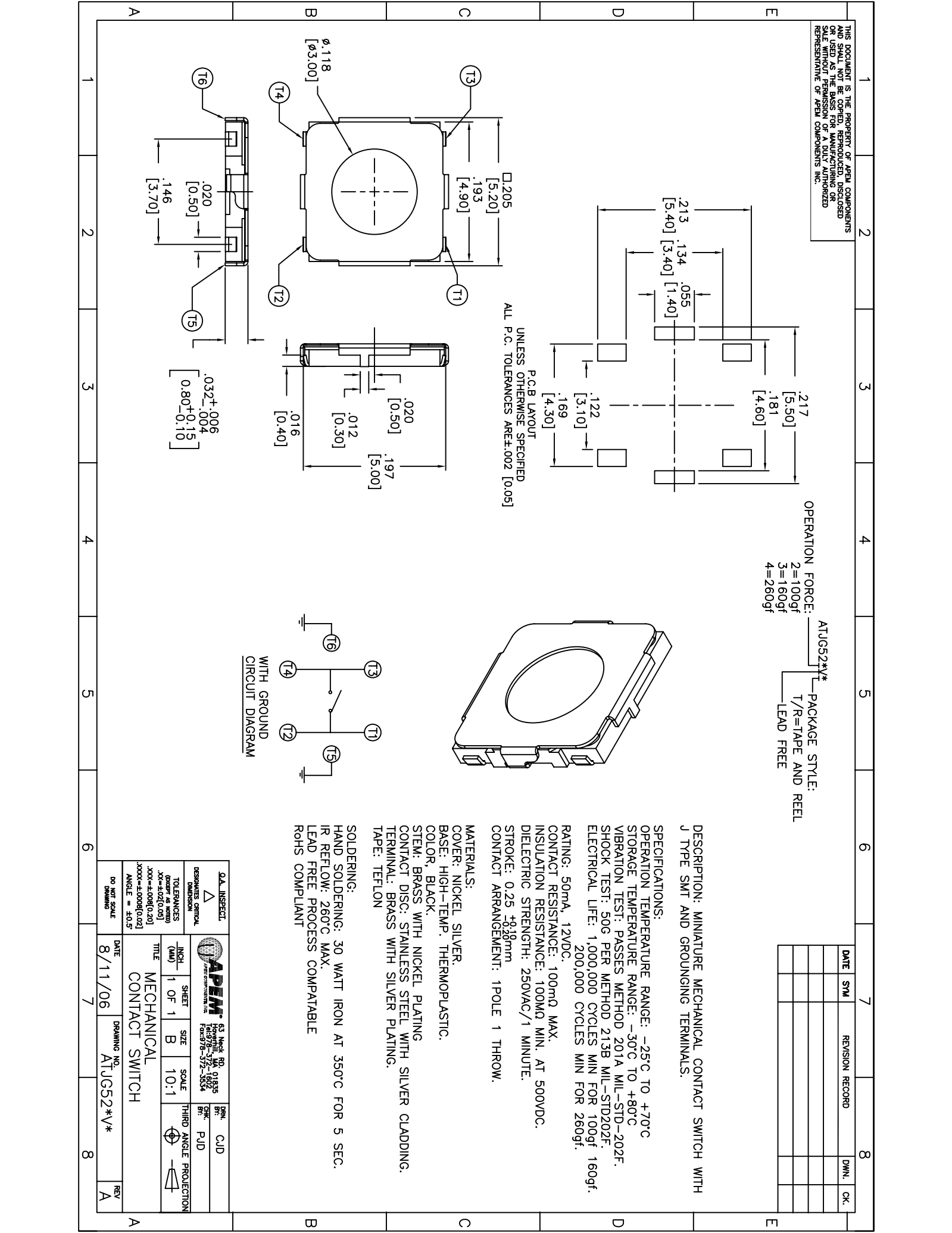
SPECIFICATIONS:  
 OPERATION TEMPERATURE RANGE: -25°C TO +70°C  
 STORAGE TEMPERATURE RANGE: -30°C TO +80°C  
 VIBRATION TEST: PASSES METHOD 201A MIL-STD-202F.  
 SHOCK TEST: 50G PER METHOD 213B MIL-STD202F.  
 ELECTRICAL LIFE: 1,000,000 CYCLES MIN FOR 100gf 160gf.  
 200,000 CYCLES MIN FOR 260gf.  
 RATING: 50mA, 12VDC.  
 CONTACT RESISTANCE: 100mΩ MAX.  
 INSULATION RESISTANCE: 100MΩ MIN. AT 500VDC.  
 DIELECTRIC STRENGTH: 250VAC/1 MINUTE.  
 STROKE: 0.25 ±0.06mm  
 CONTACT ARRANGEMENT: 1POLE 1 THROW.

MATERIALS:  
 COVER: NICKEL SILVER.  
 BASE: HIGH-TEMP. THERMOPLASTIC.  
 COLOR: BLACK.  
 STEM: BRASS WITH NICKEL PLATING  
 CONTACT DISC: STAINLESS STEEL WITH SILVER CLADDING.  
 TERMINAL: BRASS WITH SILVER PLATING.  
 TAPE: TEFLON

SOLDERING:  
 HAND SOLDERING: 30 WATT IRON AT 350°C FOR 5 SEC.  
 IR REFLOW: 260°C MAX.  
 LEAD FREE PROCESS COMPATIBLE  
 ROHS COMPLIANT

DATE	SYM	REVISION RECORD	DWN.	CK.

Q.A. INSPECT:		63 Nark. Rd. 01835 Haverhill, MA 01830 APEN COMPONENTS, INC. Phone: 978-372-3534		DRN. CJD
DESIGNATES CRITICAL DIMENSION	APEN	DR. BR.	OR. PJD	THIRD ANGLE PROJECTION
TOLERANCES (UNLESS OTHERWISE SPECIFIED)	INCH	SHEET	SIZE	SCALE
.XX = ±.02 [0.05]	1	OF 1	B	10:1
.XXX = ±.008 [0.20]	TITLE MECHANICAL CONTACT SWITCH			
.XXXX = ±.0008 [0.02]	DRAWING NO. ATUG52**V*			
ANGLE = 30.5°	DATE 8/11/06			
DO NOT SCALE DRAWING	REV A			



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- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

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## JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



Телефон: 8 (812) 309-75-97 (многоканальный)

Факс: 8 (812) 320-03-32

Электронная почта: [ocean@oceanchips.ru](mailto:ocean@oceanchips.ru)

Web: <http://oceanchips.ru/>

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, д. 2, корп. 4, лит. А