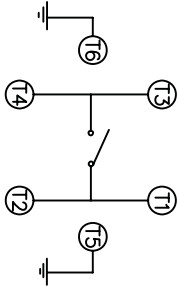
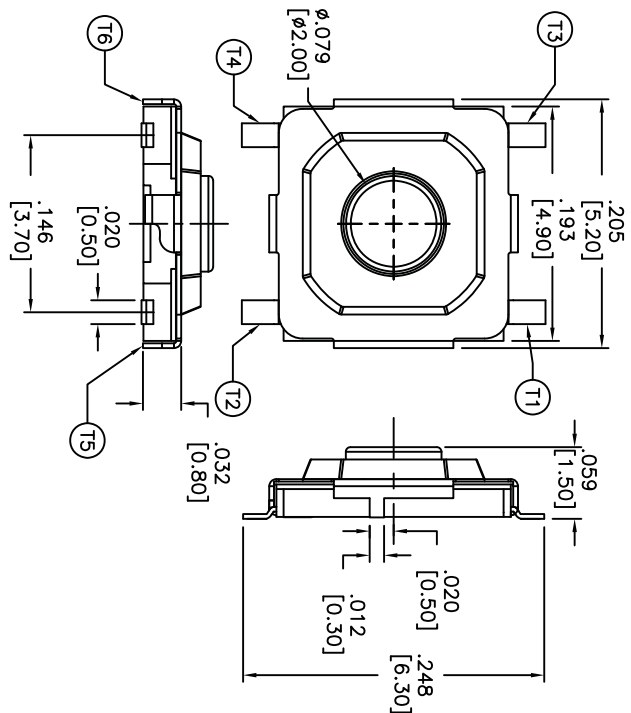
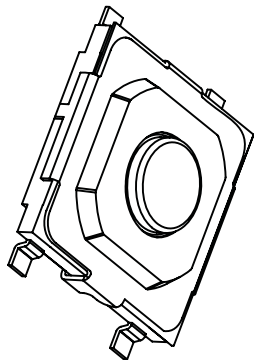
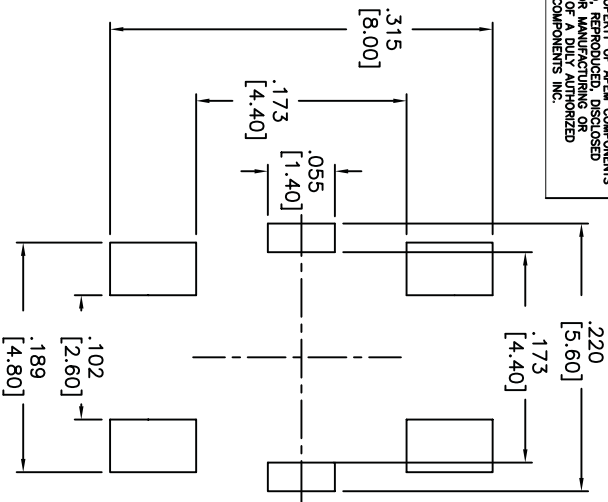


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ATMG53*/V*
PACKAGE STYLE:
T/R=TAPE AND REEL
LEAD FREE
OPERATION FORCE:
3=160gf
4=260gf



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 $\pm .004$ [0.25 $\pm .010$]

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

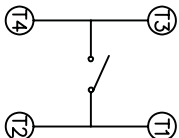
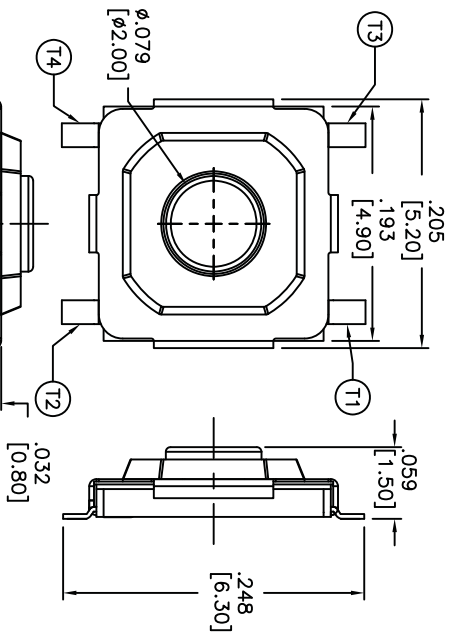
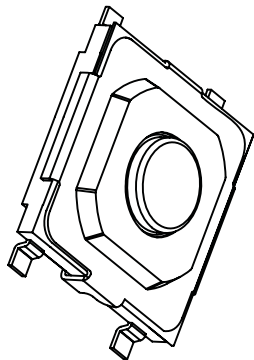
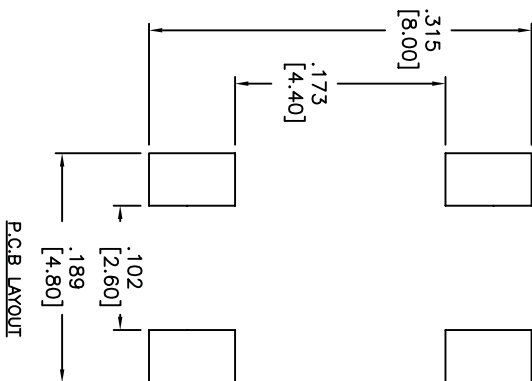
LEAD FREE PROCESS COMPATIBLE

ROHS COMPLANT

DESIGNATOR: 63 NICK RD. 01835		DRN.	CJD
APM		BR.	PJD
TOLERANCES (UNLESS OTHERWISE SPECIFIED)		THIRD ANGLE PROJECTION	
.XX=±.02(0.05)		10:1	
.XXX=±.004(0.20)		10:1	
.XXXX=±.0008(0.02)		10:1	
ANGLE = 10.5°			
DATE	08/15/05	DRAWING NO.	ATMG53*V*
DO NOT SCALE			

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ATM53*V/*
PACKAGE STYLE:
2=100gf
3=160gf
4=260gf
T/R=TAPE AND REEL
LEAD FREE



CIRCUIT DIAGRAM

DESCRIPTION: MINIATURE MECHANICAL CONTACT SWITCH
SURFACE MOUNT TERMINALS.

SPECIFICATIONS:

STROKE: .010 $\pm .004$ $\pm .010$ [0.25 $\pm .010$]
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

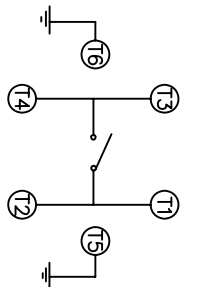
SOLDERING:
HAND SOLDERING: 30 WATT IRON AT 350°C FOR 5 SEC.
VAPOR & REFLOW: 255°C FOR 5 SEC. MAX.
NON-WASHABLE
LEAD FREE PROCESS COMPATIBLE
ROHS COMPLIANT

DATE	SYM	REVISION RECORD	DWN.	CK.

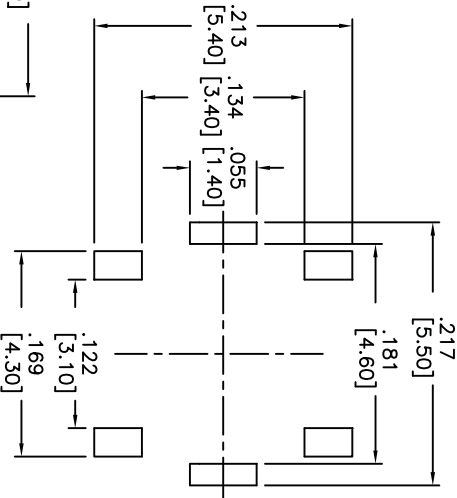
9A. INSPECT		APDM		63 Neck Rd. 01835 Haverhill, MA 01835 FAX 978-372-5554		DRN. CJD
DESIGNATES CRITICAL DIMENSION		SHEET 1 OF 1		SIZE B		BR. PJD
TOLERANCES (DIM) AS NOTED		SCALE 10:1		THIRD ANGLE PROJECTION		
.X00=±.02[0.05]						
.X00=±.008[0.20]						
.X000=±.0008[0.02]						
ANGLE = 10.5°						
DO NOT SCALE DRAWING		DATE 4/26/06		DRAWING NO. ATM53*V*		REV A

TITLE MECHANICAL CONTACT SWITCH

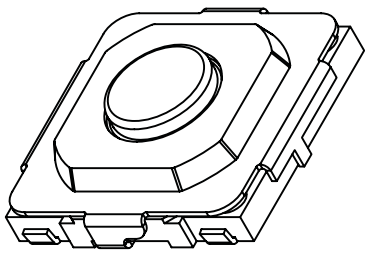
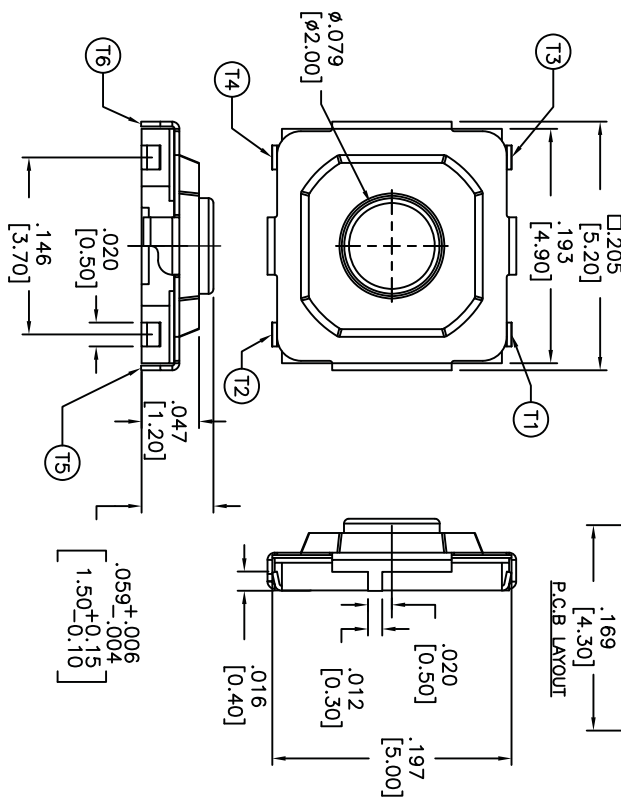
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CIRCUIT DIAGRAM



PCB LAYOUT



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

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 $\pm$ 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

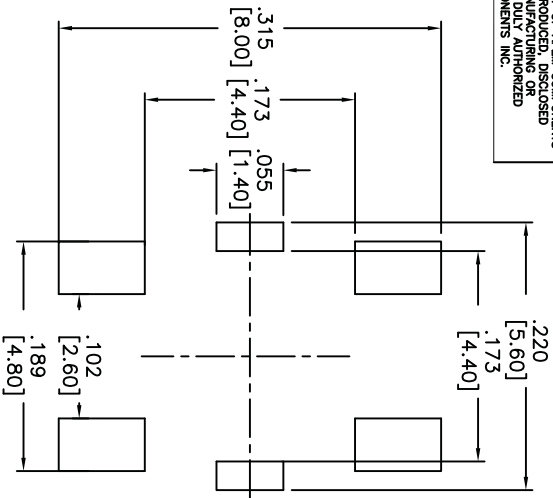
SOLDERING:

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

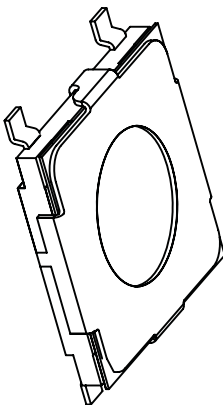
DATE	SYM	REVISION	RECORD	DWN.	CK.

Q.A. INSPECT: 		DESIGNATES OPTICAL DIMENSION		TOLERANCES (UNLESS OTHERWISE SPECIFIED)	
.XX=±.02(0.05)		.XXX=±.004(0.20)		.XXXX=±.0008(0.02)	
ANGLE = 10.5°		TITLE		THIRD ANGLE PROJECTION	
MECHANICAL CONTACT SWITCH		SHEET 1 OF 1		SIZE B	
SCALE 10:1		DATE 8/11/05		DRAWING NO. ATUG53*V*	
DO NOT SCALE DRAWING		REV A			

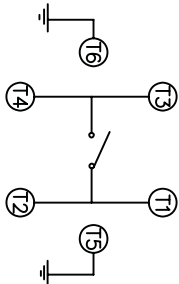
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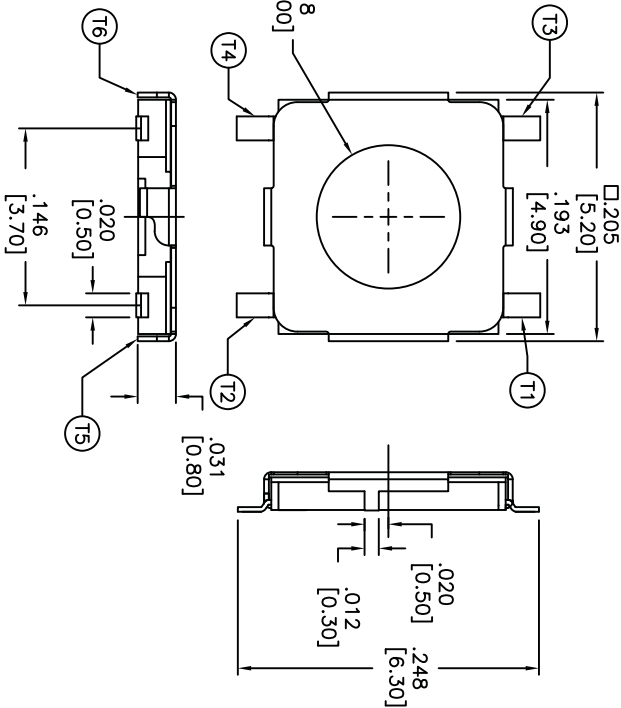
P.C.B. LAYOUT
UNLESS OTHERWISE SPECIFIED
ALL P.C. TOLERANCES ARE $\pm .002$ [0.05]



ATM652*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.

STROKE: .010 $\pm .005$ [0.25 $\pm .013$]

SHOCK TEST: 50G PER METHOD 213B MIL-STD-202F.

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

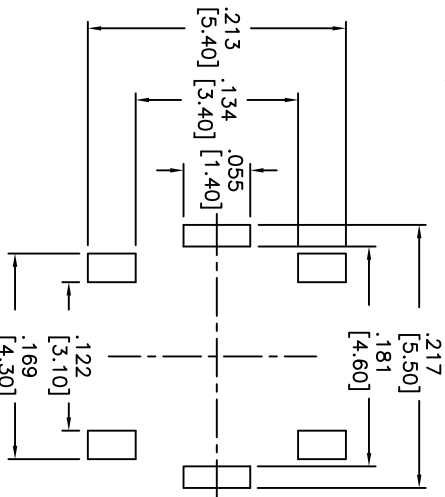
LEAD FREE PROCESS COMPATIBLE

RoHS COMPLIANT

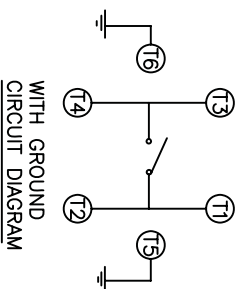
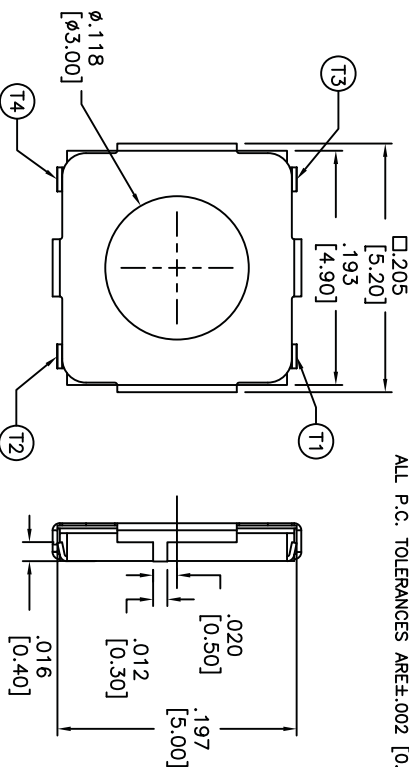
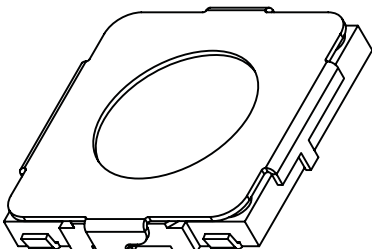
Q.A. INSPECT:		DESIGNATES CRITICAL DIMENSION		P.N.		CJD
△				B7:		
				C.R.K.		
				P.I.D		
				THIRD ANGLE PROJECTION		
						
TOLERANCES (EXCEPT AS NOTED)		INCH		SHEET		
.XX=±.02 [0.50]		1 OF 1		B		
.XXX=±.008 [0.20]				SIZE		
.XXXX=±.0008 [0.02]				SCALE		
ANGLE = 40.5°				10:1		
DO NOT SCALE DRAWING		DATE		DRAWING NO.		REV
		8/15/05		ATMG52*V*		A

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ATUG52**V*
OPERATION FORCE: _____
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 213B 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 ±0.28mm
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.	DESIGNER'S INITIAL	DATE	DO NOT SCALE
INCH	SHEET	SIZE	SCALE
1 OF 1	B	10:1	
TITLE	MECHANICAL	CONTACT SWITCH	
DATE	8/11/06	DRAWING NO.	ATUG52**V*
REV	A		