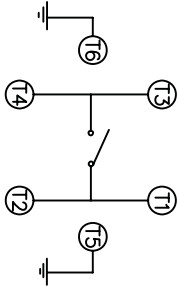
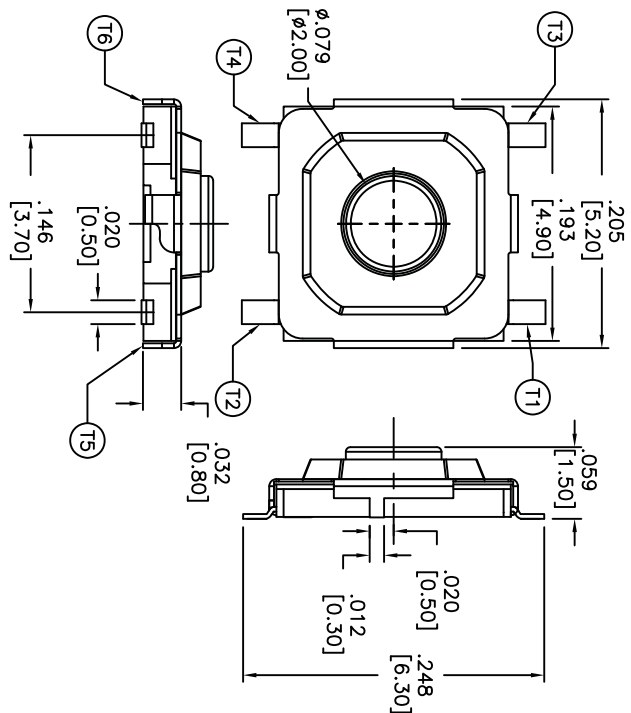
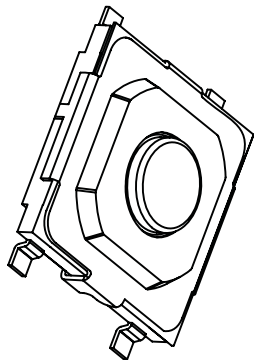
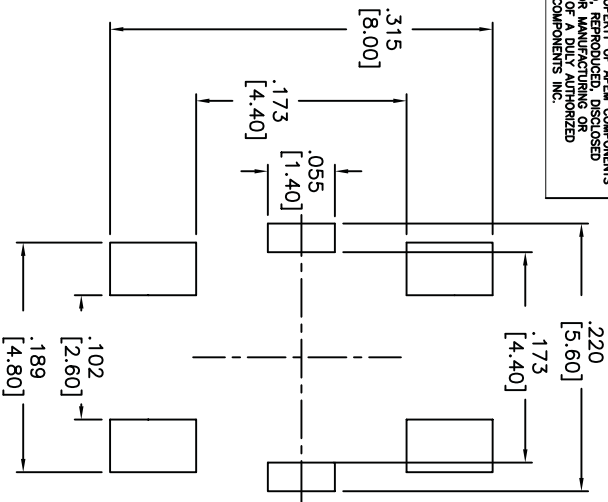


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ATMG53\*/V\*  
PACKAGE STYLE:  
T/R=TAPE AND REEL  
LEAD FREE  
OPERATION FORCE:  
3=160gf  
4=260gf



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

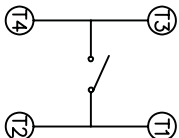
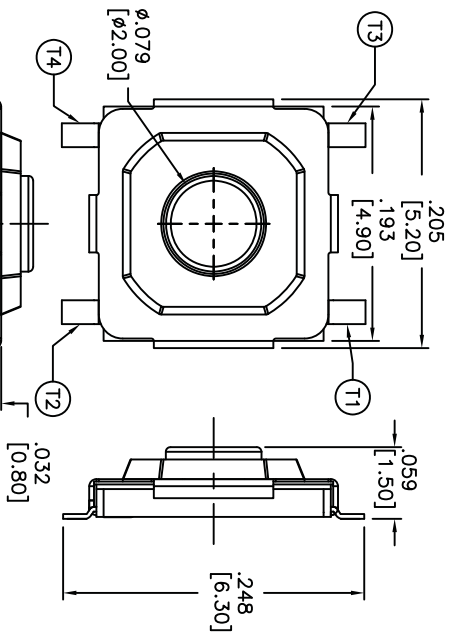
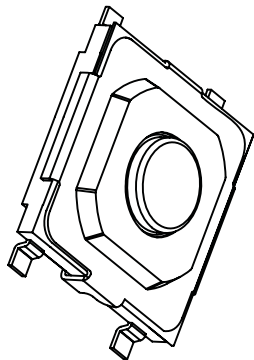
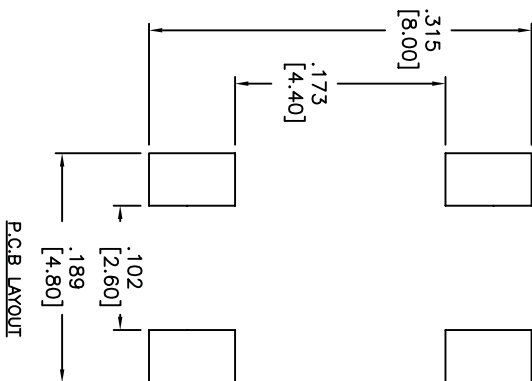
LEAD FREE PROCESS COMPATIBLE

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  
LEAD FREE



CIRCUIT DIAGRAM

DESCRIPTION: MINIATURE MECHANICAL CONTACT SWITCH  
SURFACE MOUNT TERMINALS.

SPECIFICATIONS:

STROKE: .010  $\pm .004$   $\pm .020$  [0.25  $\pm .01$ ]  
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:

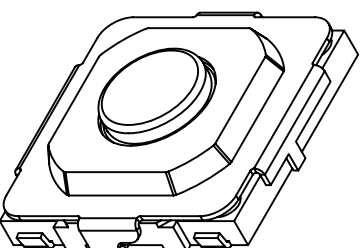
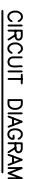
COVER: NICKEL SILVER.  
BASE: HIGH-TEMP. THERMOPLASTIC.  
COLOR: BLACK.  
STEM: BRASS WITH NICKEL PLATING  
CONTACT DISC: STAINLESS STEEL WITH SILVER PLATING.  
TERMINAL: BRASS WITH SILVER CLADDING.  
TAPE: TEFLON

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. |
|------|-----|-----------------|------|-----|
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|      |     |                 |      |     |

|                    |  |                     |  |                        |  |
|--------------------|--|---------------------|--|------------------------|--|
| 9A. INSECT.        |  | 63 Neck Rd.         |  | DIN. CJD               |  |
| DESIGNATES OPTICAL |  | Haverhill, MA 01830 |  | BR.                    |  |
| DIMENSION          |  | APDM                |  | PJD                    |  |
| TOLERANCES         |  | 1 OF 1              |  | SIZE                   |  |
| (UNLESS NOTED)     |  | B                   |  | SCALE                  |  |
| .XX±.XX(0.05)      |  | 10:1                |  | THIRD ANGLE PROJECTION |  |
| .XXX±.XX(0.20)     |  |                     |  |                        |  |
| .XXXX±.XXX(0.02)   |  |                     |  |                        |  |
| ANGLE = 10.5°      |  |                     |  |                        |  |
| DO NOT SCALE       |  | DATE                |  | DRAWING NO.            |  |
| DRAWING            |  | 4/26/06             |  | ATM53*V*               |  |
|                    |  |                     |  | REV                    |  |
|                    |  |                     |  | A                      |  |

MECHANICAL CONTACT SWITCH



ATJG53\*/\*

OPERATION FORCE: \_\_\_\_\_

PACKAGE STYLE: \_\_\_\_\_

3=160gf T/R=TAPE AND REEL

4=260gf LEAD FREE

### SPECIFICATIONS:

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

STORAGE TEMPERATURE RANGE:  $-30^{\circ}\text{C}$  TO  $+80^{\circ}\text{C}$

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: 100M $\Omega$  MIN. AT 500VDC.

DIELECTRIC STRENGTH: 250VAC/1 MINUTE.

STROKE: 0.25  $\pm$ 0.10  
-0.20mm

CONTACT ARRANGEMENT: 1POLE 1 THROW.

## MATERIALS:

COVER: NICKEL SILVER.

BASE: HIGH-TEMP. THERMOPLASTIC.

COLOR, BLACK.

SIEM. BRASS WITH NICKEL PLATING  
CONTACT DISC. STAINLESS STEEL

TERMINAL: BRASS WITH SILVER CLADDING

LEARNER. DIV  
TAPF. TEF ON

## SOLDERING

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

SEC.

IR REFLOW: 225°C MAX.

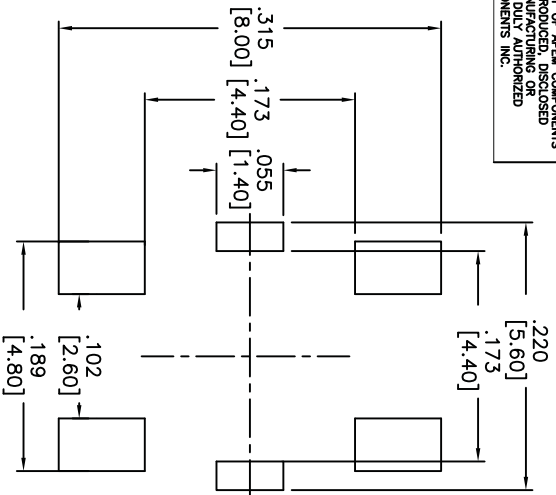
LEAD FREE PROCESS COMPATIBLE

ROHS COMPLIANT!

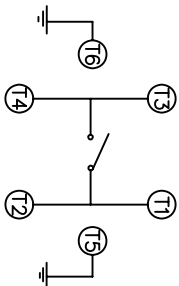
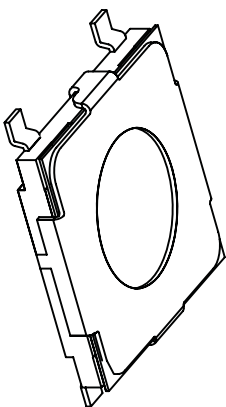
| REVISION RECORD |     |  |      |     |
|-----------------|-----|--|------|-----|
| DATE            | SYM |  | DWN. | CK. |
|                 |     |  |      |     |
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|                                                                                                                             |  |                                                                                     |  |                                                                                            |  |                                                                                                               |  |
|-----------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------|--|
| Q.A. INSPECT                                                                                                                |  |  |  | \$3 Neck RD. 011835<br>Haverhill, MA 01835<br>Tel: 617-6-3172-1602<br>Fax: 617-6-3172-3534 |  | PRN. CJD<br>CHK. PJD                                                                                          |  |
| DESIGNATES ORIGINAL                                                                                                         |  | DIMENSION<br>$\Delta$                                                               |  |                                                                                            |  |                                                                                                               |  |
| TOLERANCES<br>(UNLESS OTHERWISE NOTED)<br>XXXX=±.002 (0.002)<br>XXXX=±.0008 (0.001)<br>XXXX=±.0004 (0.002)<br>ANGLE = ±.05° |  | INCH SHEET<br>(MM) 1 OF 1                                                           |  | SIZE B<br>SCALE 10:1                                                                       |  | THIRD ANGLE PROJECTION<br> |  |
| DATE                                                                                                                        |  | TITLE                                                                               |  | DRAWING NO.                                                                                |  | REV                                                                                                           |  |
| 8/11/05                                                                                                                     |  | MECHANICAL CONTACT SWITCH                                                           |  | AIJG53*V*                                                                                  |  | A                                                                                                             |  |
| DO NOT SCALE DRAWING                                                                                                        |  |                                                                                     |  |                                                                                            |  |                                                                                                               |  |

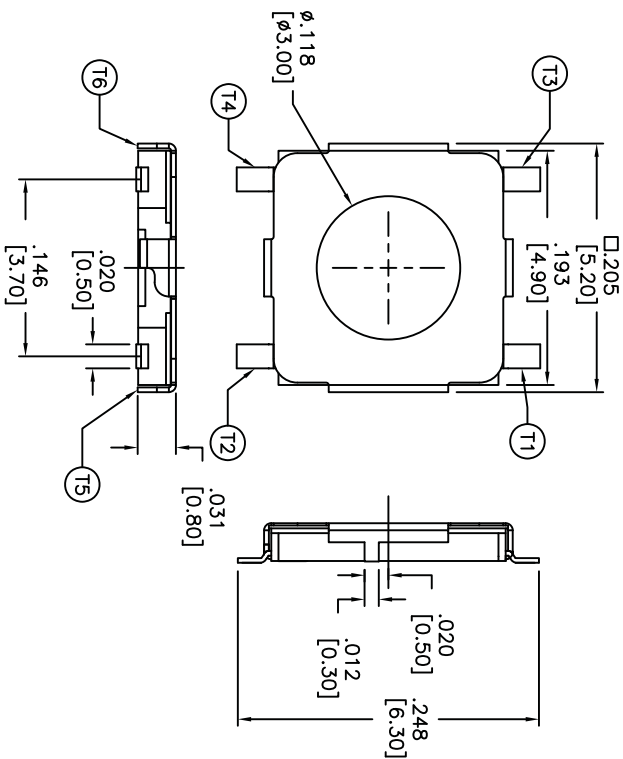
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P.C.B LAYOUT  
UNLESS OTHERWISE SPECIFIED  
ALL P.C TOLERANCES ARE  $\pm 0.02$  [0.05]



### CIRCUIT DIAGRAM



ATMG52\*V\*

OPERATION FORCE: \_\_\_\_\_

2=100gf  
3=160gf  
4=260gf

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

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

**SPECIFICATIONS:**

OPERATION TEMPERATURE RANGE:  $-25^{\circ}\text{C}$  TO  $+70^{\circ}\text{C}$

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

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

STROKE: .010  $\pm$ .004 [0.25  $\pm$ 0.10]  
          -.008  $\pm$ 0.20]

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

**ELECTRICAL LIFE: 1,000,000 CYCLES MIN FOR 100g<sup>f</sup>**

200,000 CYCLES MIN FOR 260gf.

RATING: 50mA, 12VDC.

CONTACT RESISTANCE: 100mΩ MAX.

INSULATION RESISTANCE: 100M $\Omega$  MIN. AT 500VDC.

**DIELECTRIC STRENGTH: 250VAC/1 MINUTE.**

CONTACT A

### MATERIALS:

COVER: NICKEL SILVER.

BASE: HIGH-TEMP. THERMOPLASTIC.

COLOR, BLACK.

STEM: BRASS WITH NICKEL PLATING  
CONTACT DISC: STAINLESS STEEL

CONTACT DISC: STAINLESS STEEL WITH SILVER CLADDING.  
TERMINAL: BRASS WITH SILVER PLATING

TERMINAL: BR  
TABLE: TTTI ON

TAPE: 1EFLON  
COLDEBINC.

**SOLDERING:** 30 WATT IRON AT 350°C FOR 5

HAND SOLDERING: 50 V  
SEC

SEC. 260°C MAY

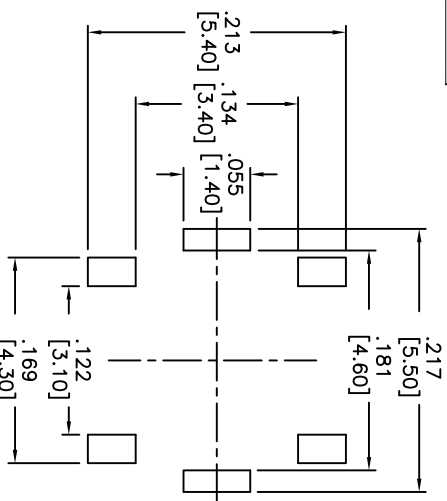
IR REFLOW: 260 C MAX  
LEAD FREE PROCESS COMPATIBLE

LEAD-FREE PRODUCTION COMPLIANT

| 7    |     | 8               |          |
|------|-----|-----------------|----------|
| DATE | SYM | REVISION RECORD | DWN. CK. |
|      |     |                 |          |
|      |     |                 |          |
|      |     |                 |          |
|      |     |                 |          |

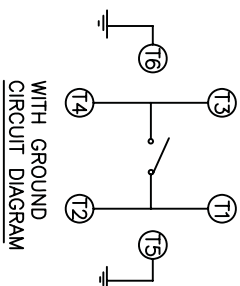
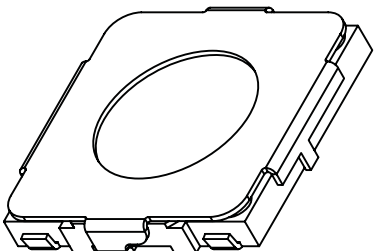
|                      |  |                                                                                                                                                                     |  |                                                                                                               |  |
|----------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------|--|
| Q.A. INSPECTED       |  |  #3 NEAL RD.<br>HOOVERVILLE, PA. 01835<br>TEL: 978-372-1802<br>FAX: 978-372-3534 |  | DRN. CJD<br>BRN. PJD<br>CHK. PJD                                                                              |  |
| DESIGNATES ORIGINAL  |  |                                                                                  |  | DRN. CJD<br>BRN. PJD<br>CHK. PJD                                                                              |  |
| DIMENSION            |  | TOLERANCES<br>(UNLESS AS NOTED)<br>.XXX"=±.02(0.05)<br>.XXX"=±.0008(0.20)<br>.XXX"=±.0008(0.02)<br>ANGLE = ±0.5°                                                    |  | THIRD ANGLE PROJECTION<br> |  |
| TITLE                |  | MECHANICAL<br>CONTACT SWITCH                                                                                                                                        |  | DRN. CJD<br>BRN. PJD<br>CHK. PJD                                                                              |  |
| DO NOT SCALE DRAWING |  | DATE 8/15/05                                                                                                                                                        |  | DRAWING NO. ATMG52*V*                                                                                         |  |
|                      |  |                                                                                                                                                                     |  | REV 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: DASCOS METHOD 2034A WITH STD 2002F

VIBRATION TEST: 50G PER METHOD 201A MIL-STD-202F.  
SHOCK TEST: 50G PER METHOD 213B MIL-STD-202F.

SHOCK TEST: 30G PER MECHD 213B MIL-SID20ZF.  
ELECTRICAL LIFE: 1 000 000 CYCLES MIN FOR 100 $\mu$ f 160 $\mu$ f

200,000 CYCLES MIN FOR 260gf.

RATING: 50mA, 12VDC.

CONTACT RESISTANCE: 100mΩ MAX.

INSULATION RESISTANCE: 100M $\Omega$  MIN. AT 500VDC.

DIELECTRIC STRENGTH: 250VAC/1 MINUTE.

STROKE: 0.25  $\pm 0.18$ mm  
CONTACT ARRANGEMENT: 1POLE 1 THROW.

## MATERIALS:

COVER: NICKEL SILVER

BASE: HIGH-TEMP. THERMOPLASTIC.

COLOR, BLACK.

STEM: BRASS WITH NICKEL PLATING  
CONTACT DISC: STAINLESS STEEL

CONIACI DISC: STAINLESS STEEL WITH SILVER CLADDING.  
TERMINI: 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 COMPATABLE  
ROHS COMPLIANT

| 7    |     | 8               |          |
|------|-----|-----------------|----------|
| DATE | SYM | REVISION RECORD | DWN. CK. |
|      |     |                 |          |
|      |     |                 |          |
|      |     |                 |          |
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|                                                                                                      |  |                                                                                                               |  |
|------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------|--|
| Q.A. INSPECT                                                                                         |  | PRN. CJD                                                                                                      |  |
|                   |  | CHK. PJD                                                                                                      |  |
| DESIGNER'S ORIGINAL                                                                                  |  |                            |  |
| DIMENSION                                                                                            |  | \$3 Newell Bld.<br>Hickory Hill, MS 01835<br>Tel: 678-372-1802<br>Fax: 678-372-3534                           |  |
| TOLERANCES<br>(UNLESS OTHERWISE SPECIFIED)<br>XXX ±.02(0.05)<br>XXX ±.008(0.20)<br>XXXX ±.0008(0.02) |  | INCH SHEET SIZE SCALE<br>1 OF 1 B 10:1                                                                        |  |
| ANGLE = 40.5°                                                                                        |  | THIRD ANGLE PROJECTION<br> |  |
| DO NOT SCALE DRAWING                                                                                 |  | DATE 8/11/06<br>DRAWING NO. ATJG52*V*<br>REV. A                                                               |  |
| TITLE<br>MECHANICAL<br>CONTACT SWITCH                                                                |  |                                                                                                               |  |