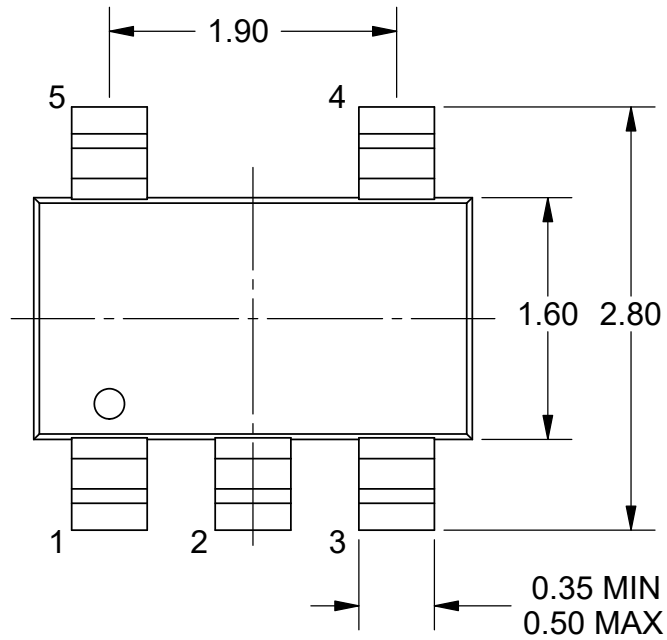
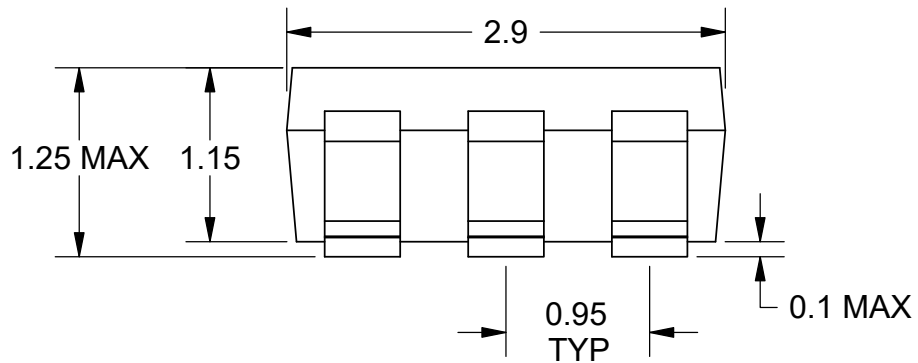


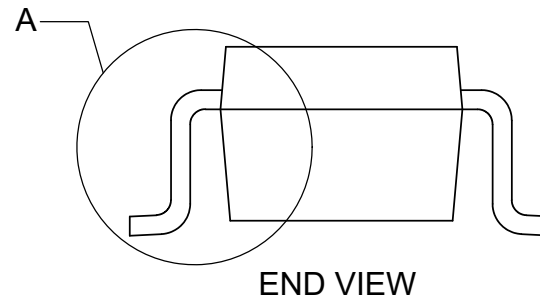
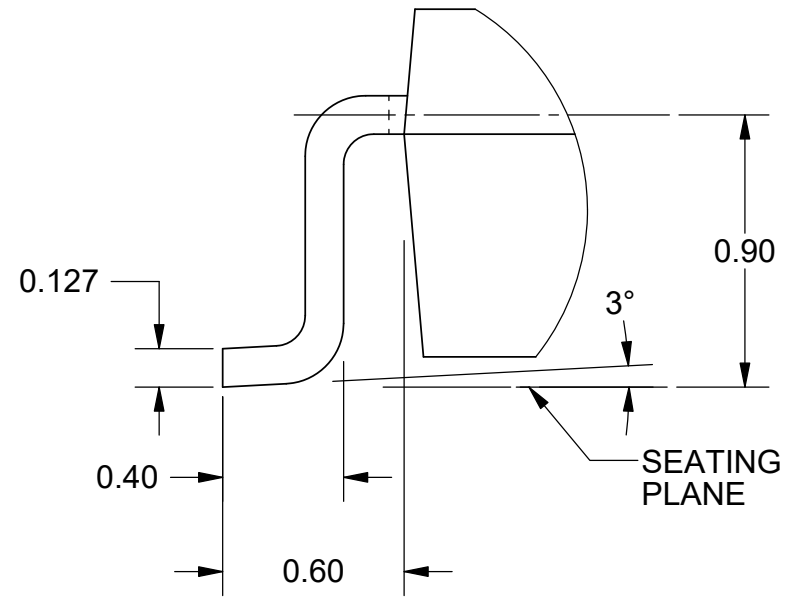
TOP VIEW



SIDE VIEW



DETAIL A
SCALE 40 : 1

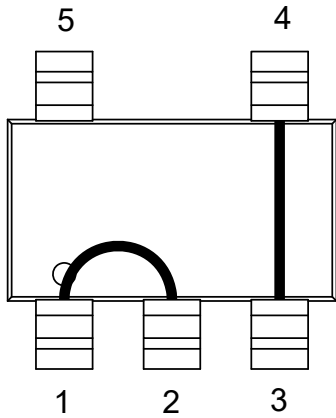


NOTES: (UNLESS OTHERWISE SPECIFIED).

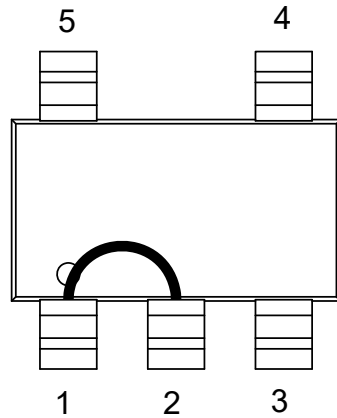
- 1) DIMENSIONS IN MM.
- 2) SEE DAISY CHAIN JUMPER DIAGRAMS (PAGE 2).
- 3) SEE PART NUMBER CONFIGURATION (PAGE 4).
- 4) RECOMMENDED PC BOARD LAYOUT PATTERN (PAGE 7).

| | | | | | | | | | |
|----------------|--|------------|--|--------------------------------------|--|--------------------|--|--------------|--|
| APPROVALS | | DATE | | TopLine [®] | | | | | |
| DRAWN J. Hines | | 5/19/2017 | | | | | | | |
| ENG M. Hart | | 5/19/2017 | | TITLE SOT25 JUMPER DAISY CHAIN | | | | | |
| MFG | | | | | | | | | |
| QA | | SCALE 20:1 | | SIZE A | | DRAWING NO. 120025 | | REV A | |
| CUST | | | | | | | | | |
| REVISED | | | | DO NOT SCALE DRAWING | | | | SHEET 1 OF 8 | |

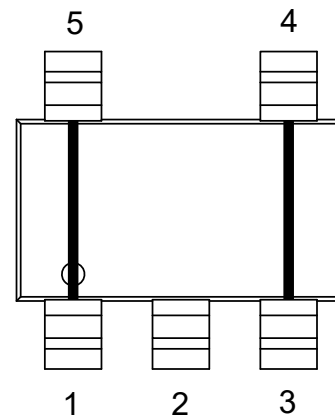
INTERNAL WIRING CIRCUIT (JUMPER)
DAISY CHAIN PART NUMBER SUFFIX
TOP VIEW



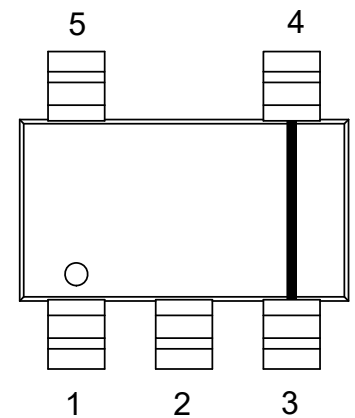
DC19
2-WIRE



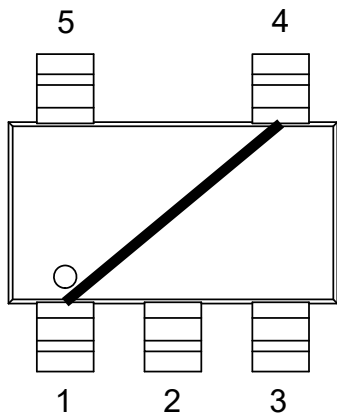
DC21
1-WIRE



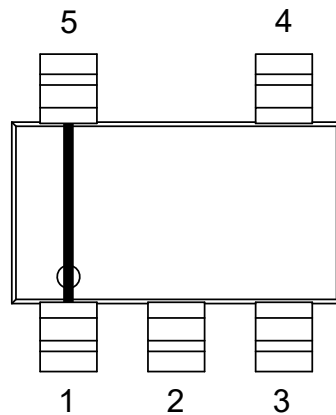
DC25
2-WIRE



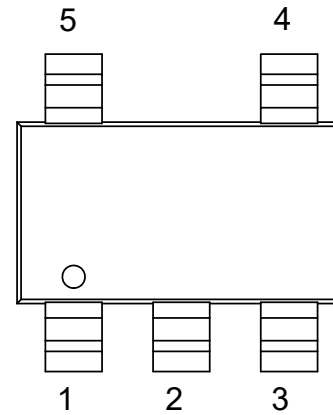
DC34
1-WIRE



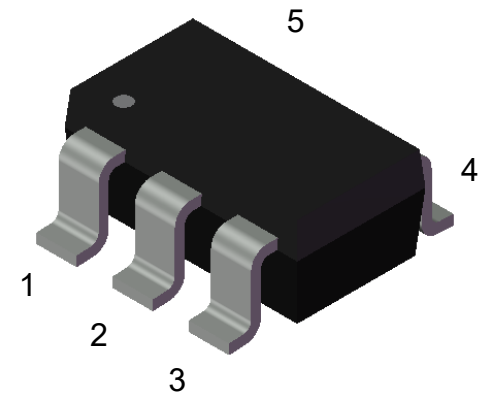
DC41
1-WIRE



DC51
1-WIRE



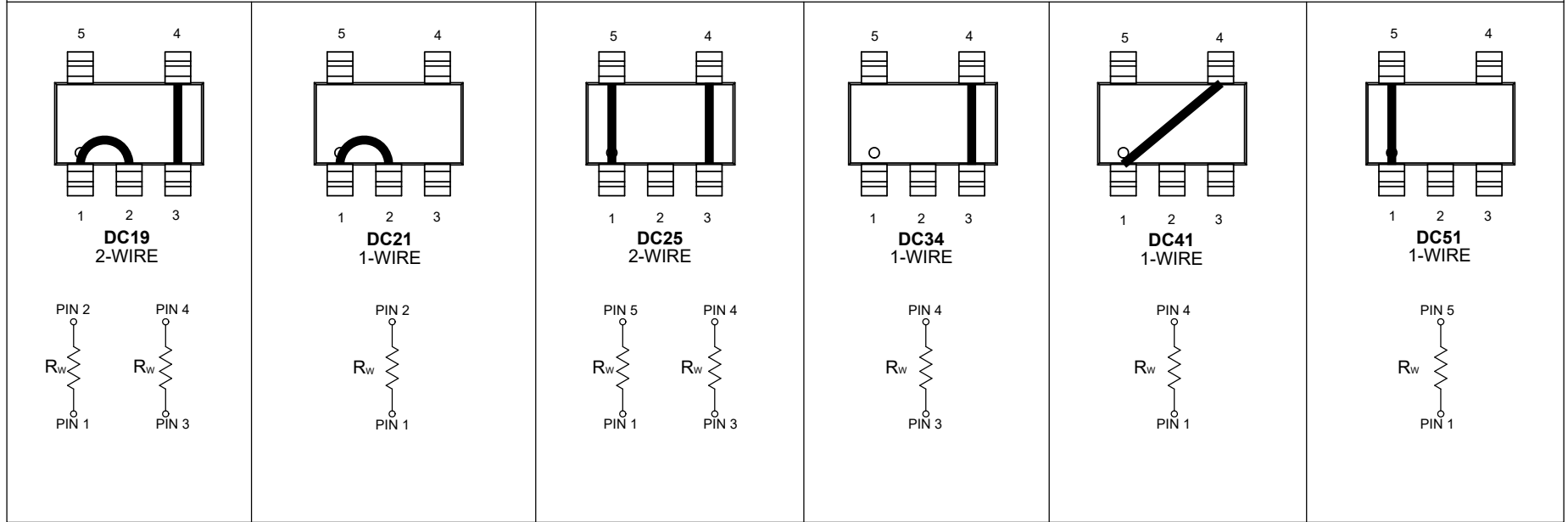
ISO
NO WIRE
FULLY ISOLATED



SOT25 PACKAGE

| | | | |
|-----------------------------|------|-----------------------------|--------------|
| TopLine [®] | | | |
| TITLE | | SOT25 JUMPER DAISY CHAIN | |
| SCALE | SIZE | DRAWING NO. | REV |
| 15:1 | A | 120025 | A |
| DO NOT SCALE DRAWING | | | SHEET 2 OF 8 |

SCHEMATIC EQUIVALENT INTERNAL CIRCUIT



R_w = GOLD WIRE-BOND.

| TEMPERATURE RATING | |
|---------------------------------------------|------------------|
| JUNCTION TEMP T_J | 150 °C |
| STORAGE TEMP T_{stg} | -65 °C TO 150 °C |
| PEAK REFLOW TEMP T_{reflow} 10 SECONDS | 260 °C |

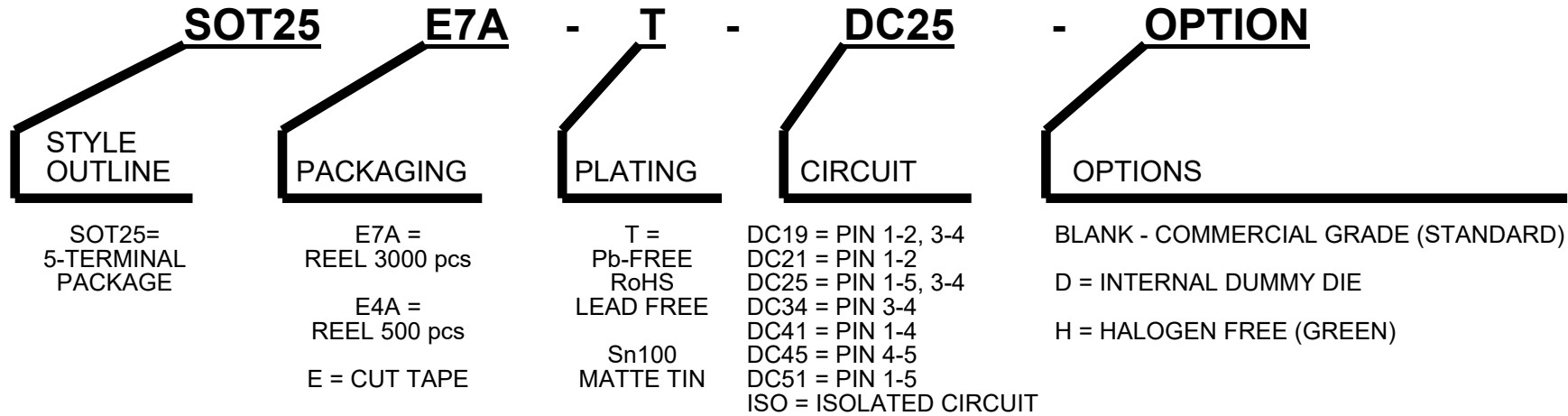
| THERMAL RESISTANCE | |
|---------------------------------------------------------|--------|
| JUNCTION TO AMBIENT ($T_a=25^\circ$) $R_{th(j-a)}$ | 350K/W |

| ELECTRICAL RESISTANCE MILIOHM (DC) MAX | | | | |
|-------------------------------------------|------------|------------|------------|------------|
| CIRCUIT | PIN 1 TO 2 | PIN 1 TO 5 | PIN 3 TO 4 | PIN 1 TO 4 |
| DC19 | 50 mΩ | -- | 50 mΩ | -- |
| DC21 | 50 mΩ | -- | -- | -- |
| DC25 | -- | 50 mΩ | 50 mΩ | -- |
| DC34 | -- | -- | 50 mΩ | -- |
| DC41 | -- | -- | -- | 50 mΩ |
| DC51 | -- | 50 mΩ | -- | -- |

| MAXIMUM ELECTRICAL (DC) RATING | |
|--------------------------------|-------|
| WORKING VOLTAGE | 100V |
| CURRENT RATING | 150mA |
| POWER @ 25 °C | 200mV |

| | | | |
|-----------------------------|------|-----------------------------|--------------|
| TopLine [®] | | | |
| TITLE | | SOT25 JUMPER DAISY CHAIN | |
| SCALE | SIZE | DRAWING NO. | REV |
| 8:1 | A | 120025 | A |
| DO NOT SCALE DRAWING | | | SHEET 3 OF 8 |

PART NUMBERING SYSTEM



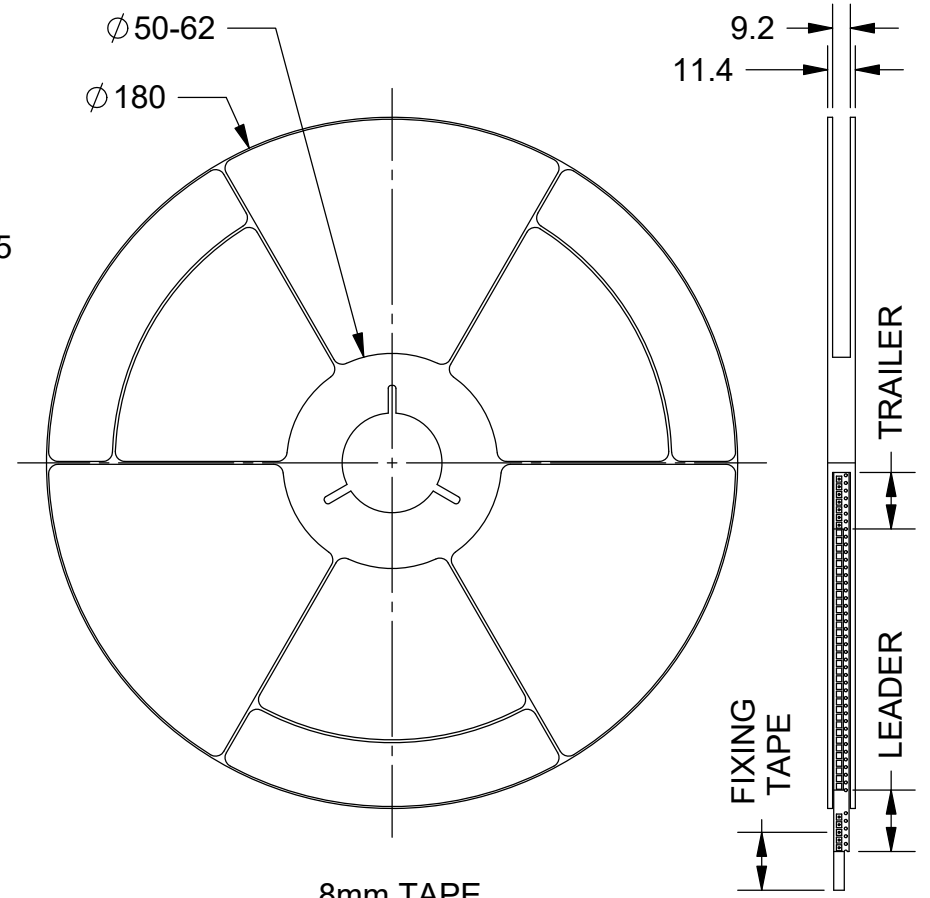
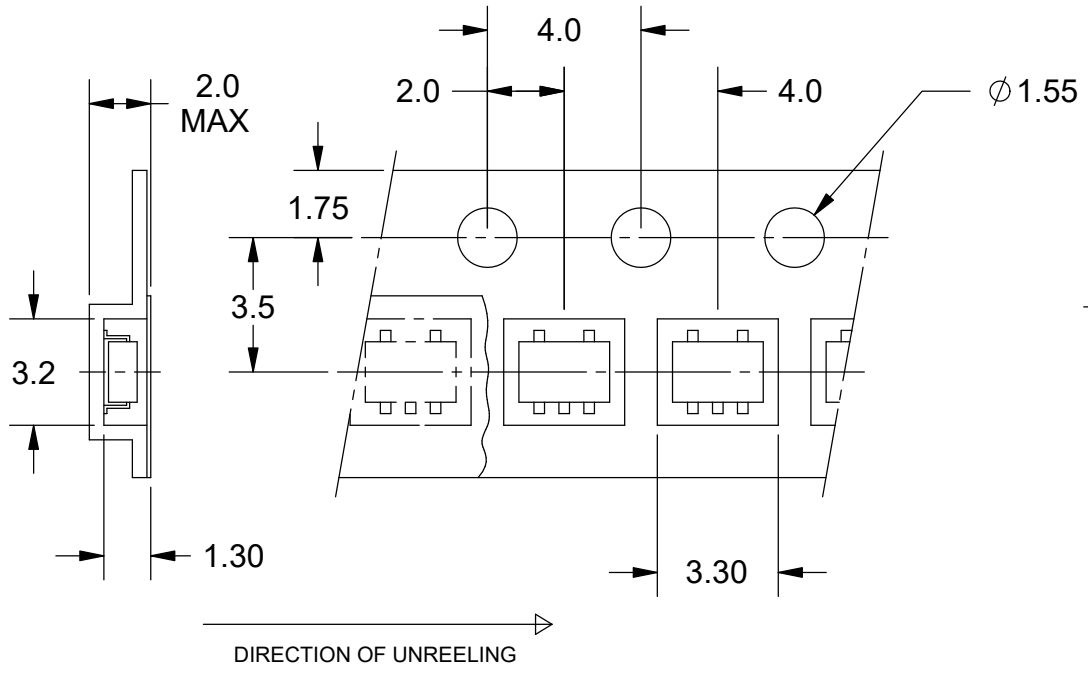
| PART NUMBER | SHORTED PINS | NOTES | RoHS Pb-FREE | MSL LEVEL | HALOGEN FREE | GRADE | TOP MARK |
|------------------|--------------|----------|--------------|-----------|--------------|------------|----------|
| SOT25E7A-TIN | N/A | DUMMY | YES | 3 | NO | COMMERCIAL | N/A |
| SOT25E7A-T-ISO | NONE | ISOLATED | YES | 3 | NO | COMMERCIAL | ISO |
| SOT25E7A-T-DC19 | 1-2, 3-4 | 2-WIRES | YES | 3 | NO | COMMERCIAL | 19D |
| SOT25E7A-T-DC21 | 1-2 | 1-WIRE | YES | 3 | NO | COMMERCIAL | 21D |
| SOT25E7A-T-DC25 | 1-5, 3-4 | 2-WIRES | YES | 3 | NO | COMMERCIAL | 25D |
| SOT25E7A-T-DC41 | 1-4 | 1-WIRE | YES | 3 | NO | COMMERCIAL | 41D |
| SOT25E7A-T-DC45 | 4-5 | 1-WIRE | YES | 3 | NO | COMMERCIAL | 45D |
| SOT25E7A-T-DC51 | 1-5 | 1-WIRE | YES | 3 | NO | COMMERCIAL | 51D |
| SOT25E7A-T-DC21H | 1-2 | 1-WIRE | YES | 1 | YES | COMMERCIAL | 21H |
| SOT25E7A-T-DC34H | 3-4 | 1-WIRE | YES | 1 | YES | COMMERCIAL | 34H |
| SOT25E7A-T-DC45H | 4-5 | 1-WIRE | YES | 1 | YES | COMMERCIAL | 45H |
| SOT25E7A-T-DC51H | 1-5 | 1-WIRE | YES | 1 | YES | COMMERCIAL | 51H |

NOTES: ADD "D" TO END OF PART NUMBER FOR DUMMY SILICON DIE.

| | | | |
|-----------------------------|------|-----------------------------|--------------|
| TopLine [®] | | | |
| TITLE | | SOT25 JUMPER DAISY CHAIN | |
| SCALE | SIZE | DRAWING NO. | REV |
| 25:1 | A | 120025 | A |
| DO NOT SCALE DRAWING | | | SHEET 4 OF 8 |

TAPE SPECIFICATION FOR SOT25 (SC74A)
SURFACE MOUNT DEVICE

PACKAGE REEL




8mm TAPE
SIZE OF REEL
180mm (7")
3,000 PCS

ALL DIMENSIONS IN mm

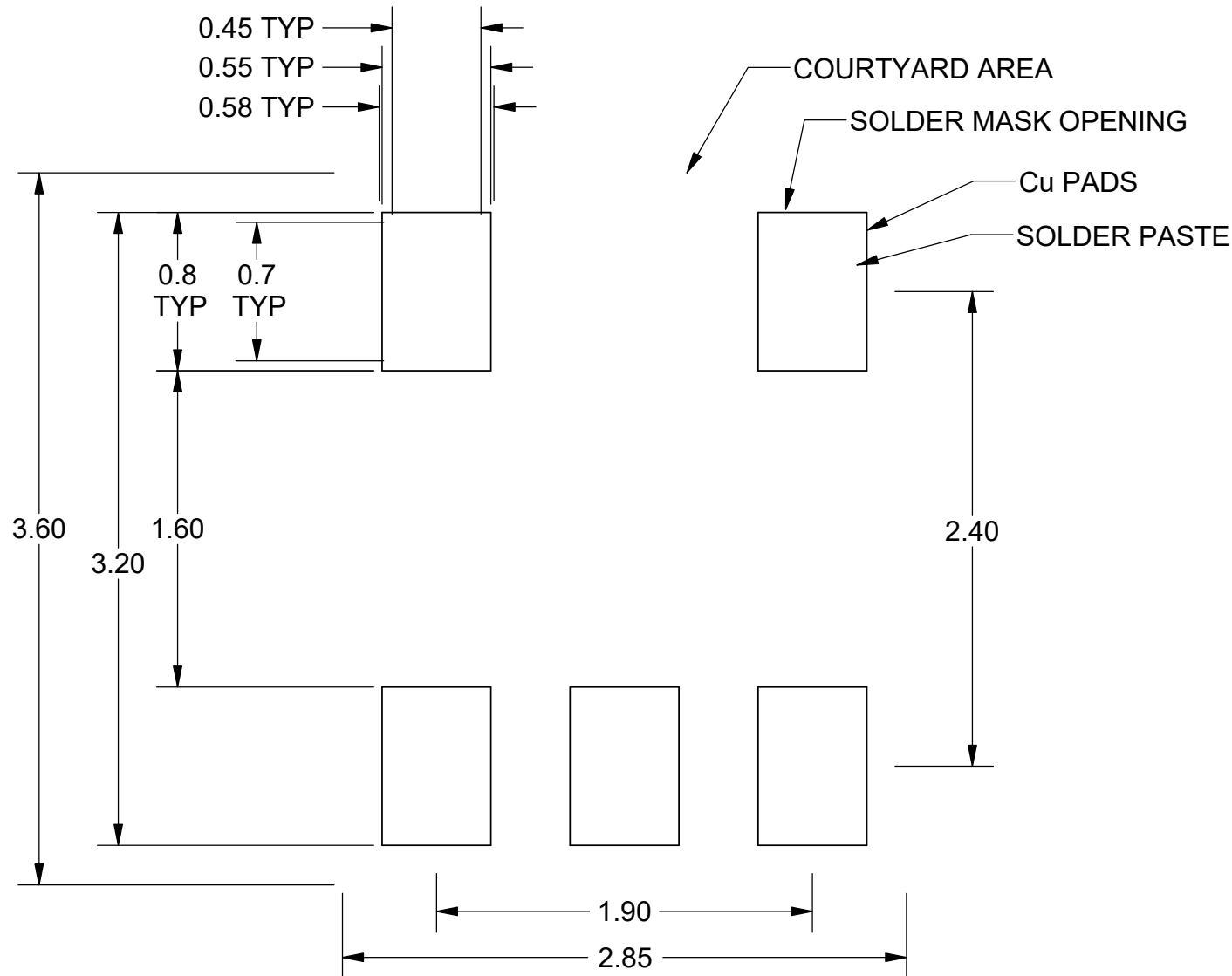
| | | | |
|-----------------------------|------|-----------------------------|--------------|
| TopLine [®] | | | |
| TITLE | | SOT25 JUMPER DAISY CHAIN | |
| SCALE | SIZE | DRAWING NO. | REV |
| 1:1 | A | 120025 | A |
| DO NOT SCALE DRAWING | | | SHEET 5 OF 8 |

MATERIALS CONTENT DECLARATION FORM
SOT25 (SC74A) PACKAGE

| SOT25 (SC74A) PACKAGE Pb-FREE RoHS | | | | | |
|-------------------------------------------|----------------------------------------------|---------------------------------|---------------|---------------|-----------------------------------------|
| 1 PC WT: 16.21 mg | | | | | |
| COMPOSITION BREAKDOWN | M.U.M. (MAKE UP OF MATERIALS) | CHEMICAL COMPOSITION | CAS NO | MASS % | SUBSTANCE WEIGHT (IN mg) |
| LEADFRAME (5.3 mg) | A194 COPPER | Cu | 7440-50-8 | 97.50% | 5.168 |
| | | Fe | 7439-89-6 | 2.35% | 0.125 |
| | | P | 7723-14-0 | 0.03% | 0.002 |
| | | Zn | 7440-66-6 | 0.12% | 0.006 |
| DIE CHIP (1.5 mg) | SILICON | SILICON (Si) | 7440-21-3 | 100% | 1.5 |
| BONDING WIRE (0.8 mg) | GOLD | GOLD (Au) | 7440-57-5 | 100% | 0.8 |
| ENCAPSULATION (7.41 mg) | EPOXY RESIN | FUSED SILICA | 60676-86-0 | 87.50% | 6.48 |
| | | EPOXY RESIN | 129915-35-1 | 5.00% | 0.37 |
| | | CARBON BLACK | 1333-86-4 | 0.50% | 0.04 |
| | | EPOXY CRESOL NOVALAC | 29690-82-2 | 2.00% | 0.15 |
| | | PHENOL RESIN | 90003-35-4 | 5.00% | 0.37 |
| TERMINATION PLATING (1.20 mg) | PURE TIN | TIN (Sn) | 7440-31-5 | 100 | 1.2 |

| | | | |
|---------------------------------------------------------------------------------------|-----------|-----------------------------|----------|
|  | | | |
| TITLE | | SOT25 JUMPER DAISY CHAIN | |
| SCALE 1:1 | SIZE A | DRAWING NO. 120025 | REV A |
| DO NOT SCALE DRAWING | | SHEET 6 OF 8 | |

PC BOARD LAND PATTERN
SOT25
SOT23-5L

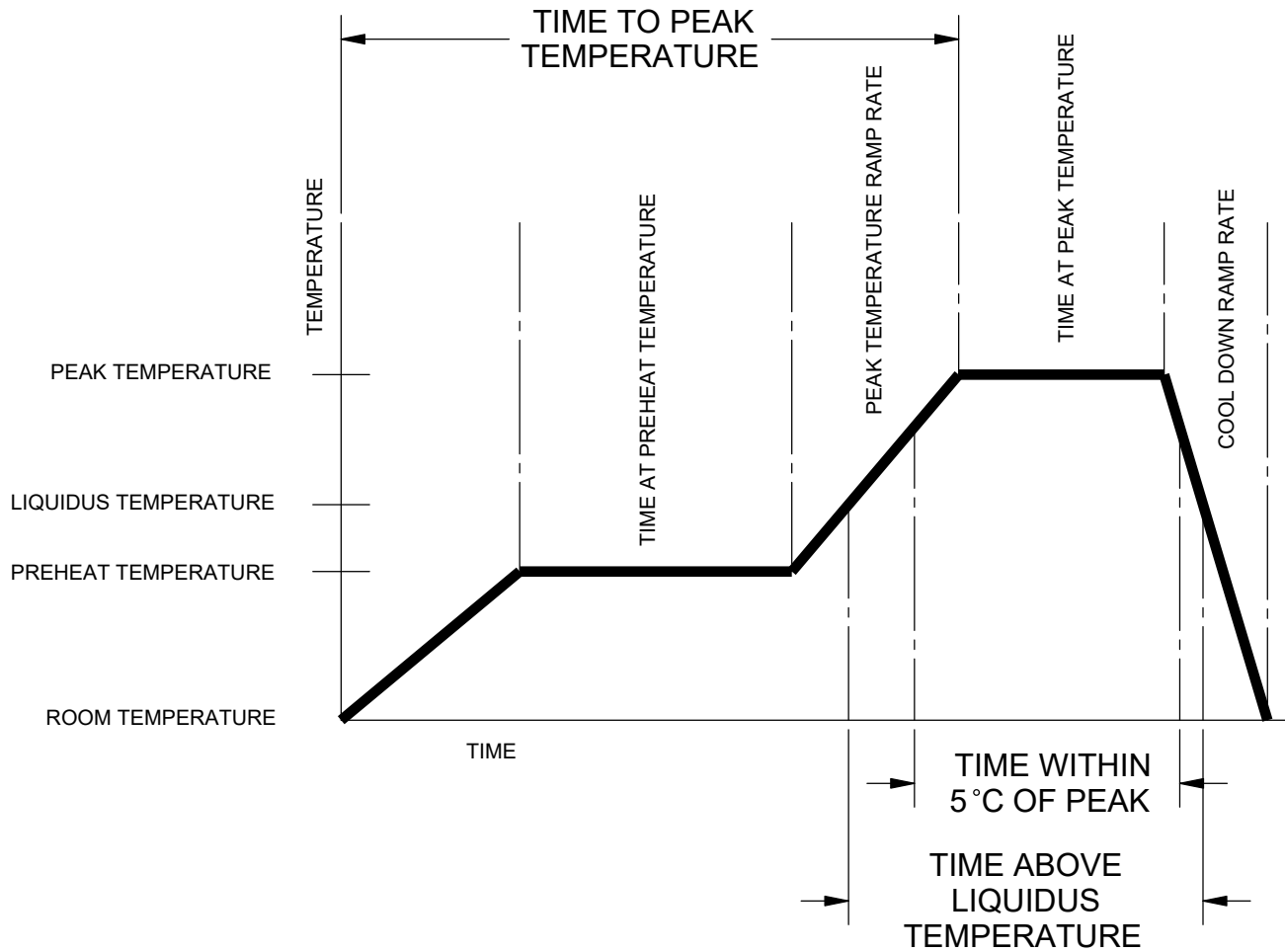


NOTES: (UNLESS OTHERWISE SPECIFIED).

- 1) DIMENSIONS IN MM.
- 2) PCB BOARD DIMENSIONS ARE PRESENTED ONLY AS A GUIDELINE.
DESIGNERS SHOULD USE THEIR OWN EXPERIENCE WHEN DESIGNING PCB.

| | | | |
|-----------------------------|------|-----------------------------|--------------|
| TopLine [®] | | | |
| TITLE | | SOT25 JUMPER DAISY CHAIN | |
| SCALE | SIZE | DRAWING NO. | REV |
| 30:1 | A | 120025 | A |
| DO NOT SCALE DRAWING | | | SHEET 7 OF 8 |

LEAD FREE REFLOW PROFILE OF SMD PACKAGE



| DESCRIPTION | REQUIREMENT |
|----------------------------|------------------------------|
| AVERAGE PREHEAT RAMP RATE | 3°C /SECOND MAXIMUM |
| PREHEAT TEMPERATURE | 150°C MINIMUM, 200°C MAXIMUM |
| PREHEAT TIME | 60 TO 80 SECONDS |
| RAMP TO PEAK | 3°C /SECOND MAXIMUM |
| TIME OVER LIQUIDUS (217°C) | 60 TO 150 SECONDS |
| PEAK TEMPERATURE | 260°C +0/-5°C |
| TIME WITHING 5°C OF PEAK | 20 TO 40 SECONDS |
| RAMP - COOL DOWN | 6°C /SECONDS MAXIMUM |
| TIME 25°C TO PEAK | 8 MINUTES MAXIMUM |

| | | | |
|-----------------------------|------|-----------------------------|--------------|
| TopLine [®] | | | |
| TITLE | | SOT25 JUMPER DAISY CHAIN | |
| SCALE | SIZE | DRAWING NO. | REV |
| 1:1 | A | 120025 | A |
| DO NOT SCALE DRAWING | | | SHEET 8 OF 8 |