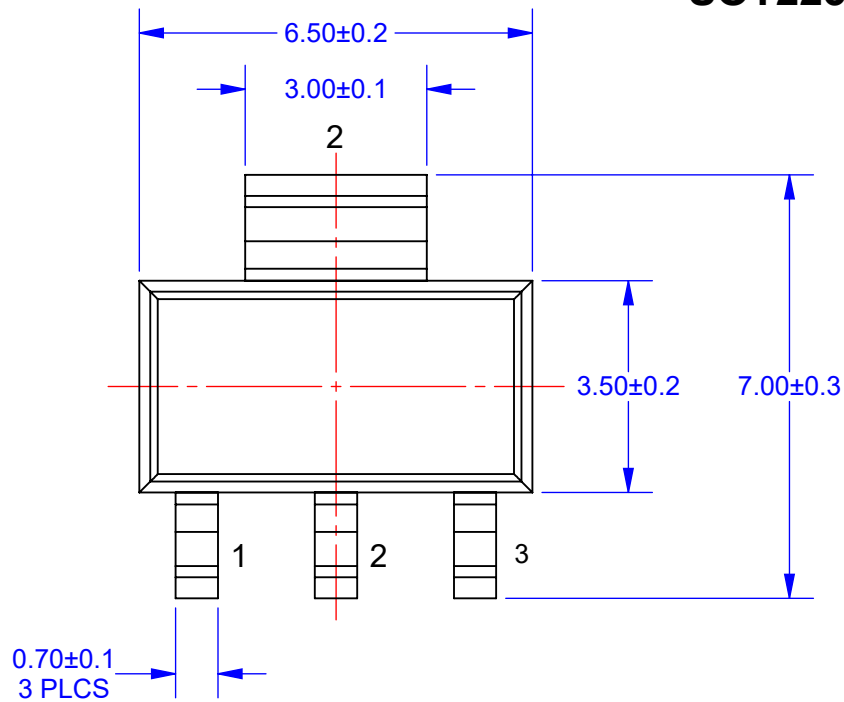
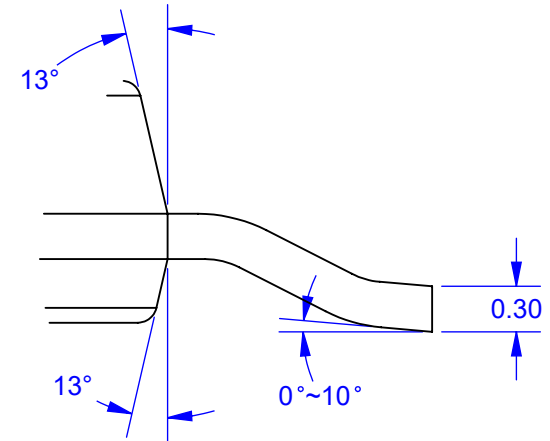


# ZERO OHM JUMPER SOT223 PACKAGE

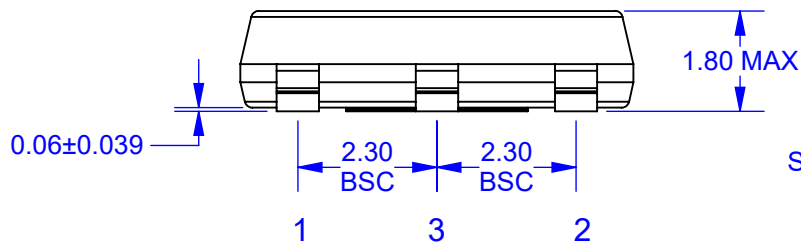
**TOP VIEW**



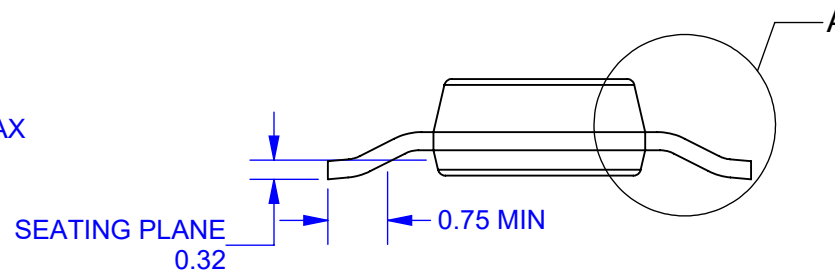
**DETAIL A  
SCALE 20:1**



**SIDE VIEW**




**END VIEW**

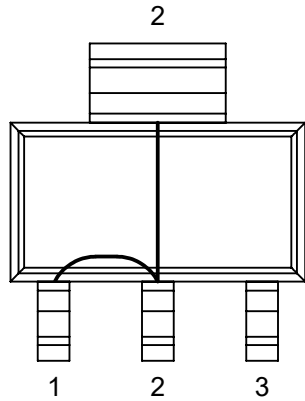


Notes: (Unless Otherwise Specified).

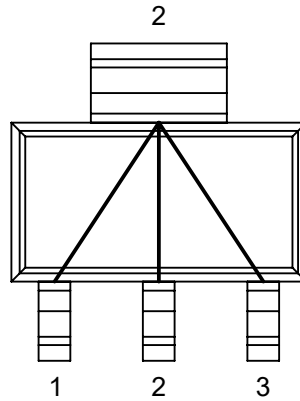
- 1) DIMENSIONS IN mm.
- 2) SEE DAISY CHAIN JUMPER DIAGRAMS (PAGE 2).
- 3) SEE PART NUMBER CONFIGURATION (PAGE 4).
- 4) RECOMMENDED PC BOARD LAYOUT PATTERN (PAGE 7).
- 5) JEDEC TO-261AA.

APPROVALS		DATE						
DRAWN	T. Au	2/10/2021					<b>TITLE</b> SOT223 JUMPER ZERO OHM RESISTORS	
ENG	M. Hart	2/10/2021						
MFG								
QA								
CUST								
REVISED			DO NOT SCALE DRAWING		SHEET 1 OF 7			

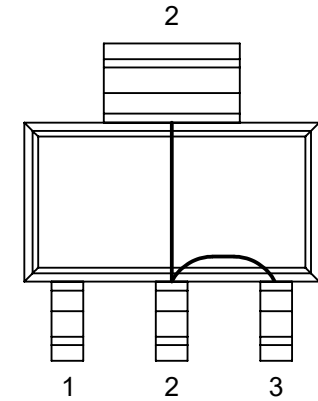
# INTERNAL WIRING CIRCUIT (JUMPER) DAISY CHAIN PART NUMBER SUFFIX TOP VIEW



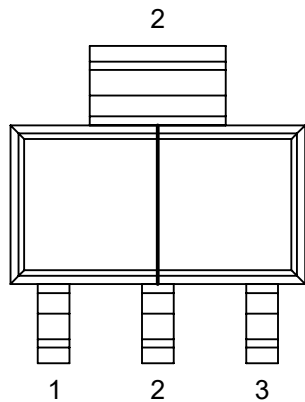
**DC124**



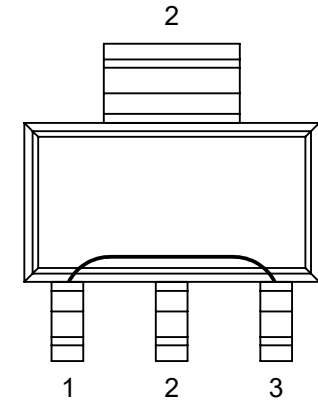
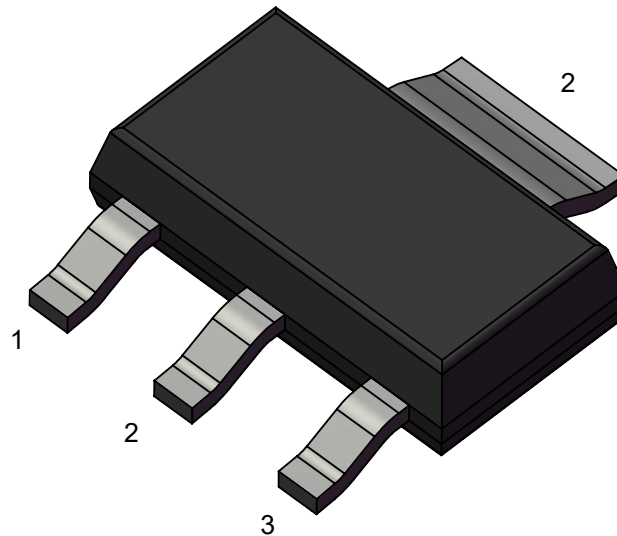
**DC123**



**DC23**



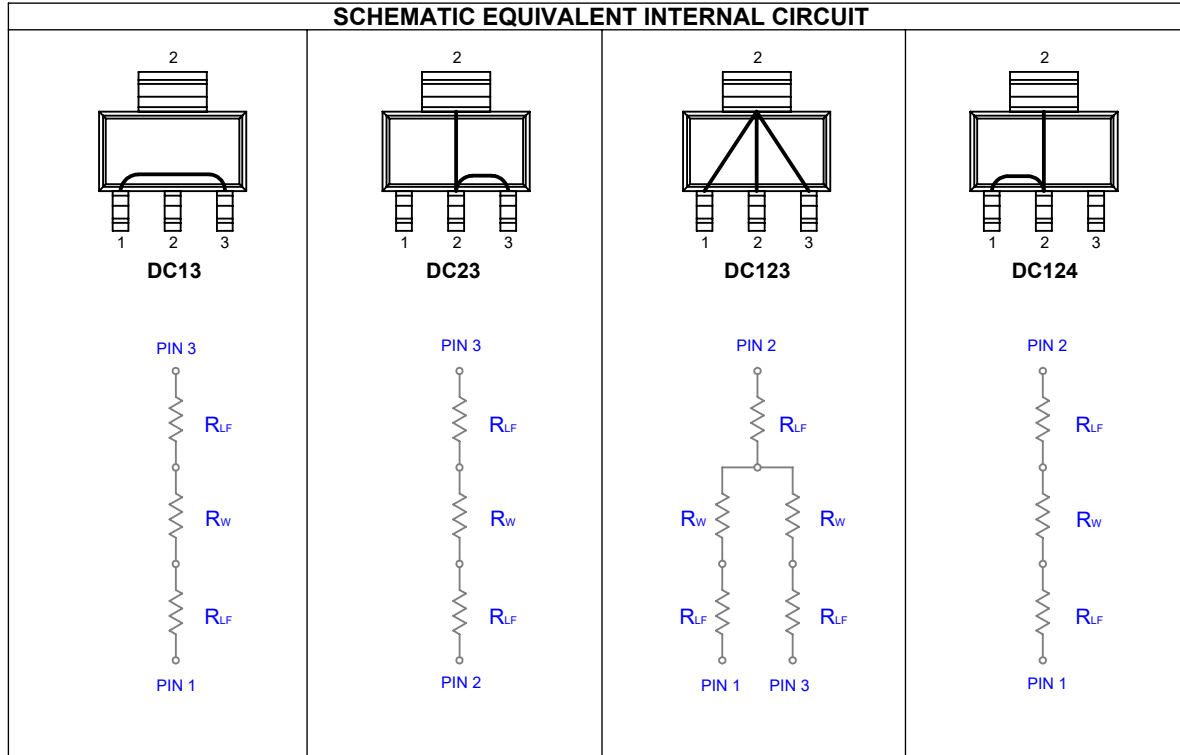
**ISO  
NO CONNECTION**



**DC13**

<b>TopLine</b> ®			
TITLE <b>SOT223 JUMPER ZERO OHM RESISTORS</b>			
SCALE 6:1	SIZE A	DRAWING NO. 120223	REV A
DO NOT SCALE DRAWING			SHEET 2 OF 7

**SCHEMATIC EQUIVALENT INTERNAL CIRCUIT**




$R_W$  = WIRE-BOND.  $R_{LF}$  = LEAD FRAME.

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

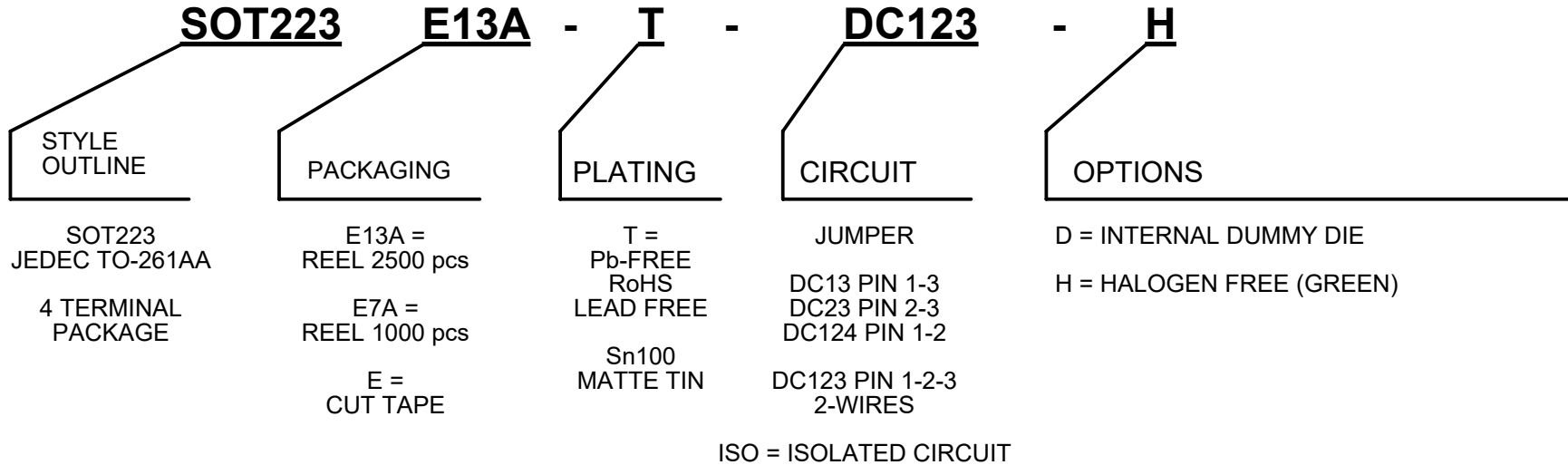
THERMAL RESISTANCE	
JUNCTION TO AMBIENT ( $T_a=25^\circ$ ) $R_{\theta(j-a)}$	350K/W

ELECTRICAL RESISTANCE MILIOHM (DC) MAX			
CIRCUIT	PIN 1 TO 3	PIN 2 TO 3	PIN 1 TO 2
DC23	--	50 mΩ	--
DC123	75 mΩ	50 mΩ	50 mΩ
DC124	--	--	50 mΩ
DC13	50 mΩ	--	--

MAXIMUM ELECTRICAL (DC) RATING	
WORKING VOLTAGE	100 V
CURRENT RATING	500 mA
POWER @ 25 °C	2 W

			
TITLE SOT223 JUMPER ZERO OHM RESISTORS			
SCALE 3:1	SIZE A	DRAWING NO. 120223	REV A
DO NOT SCALE DRAWING			SHEET 3 OF 7

# PART NUMBERING SYSTEM



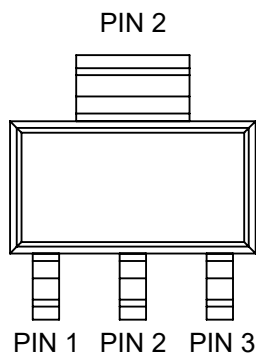
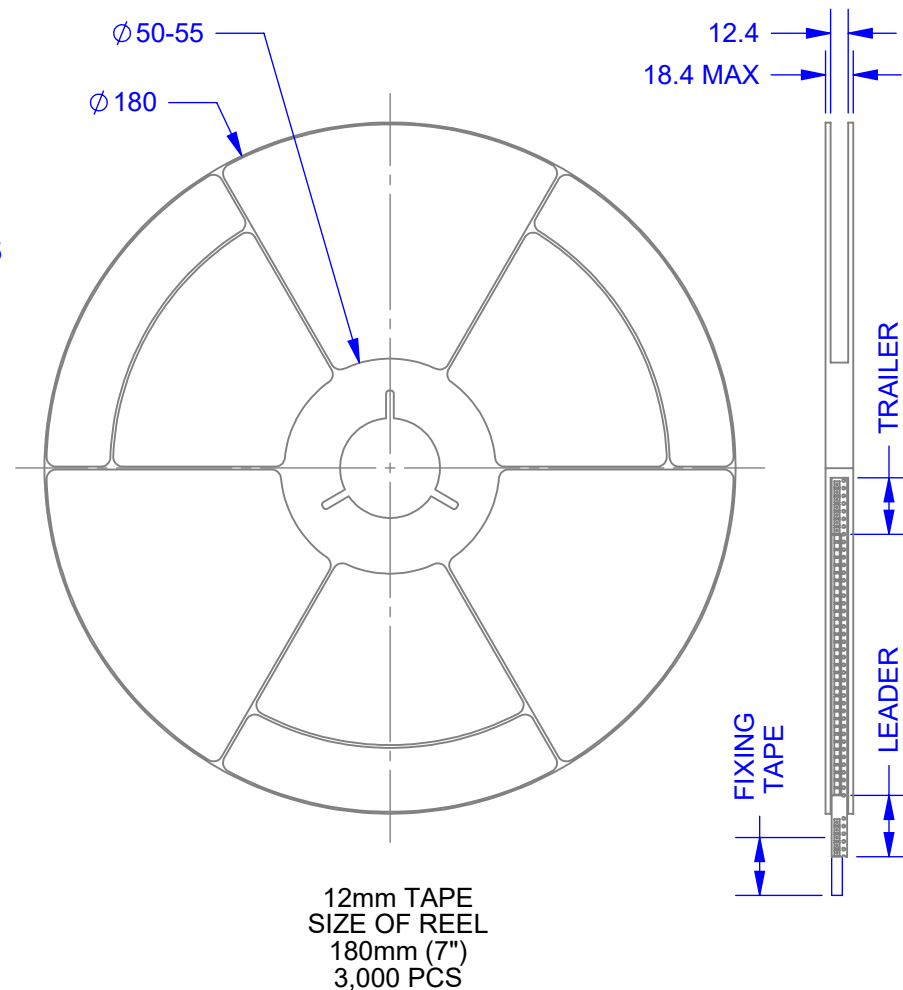
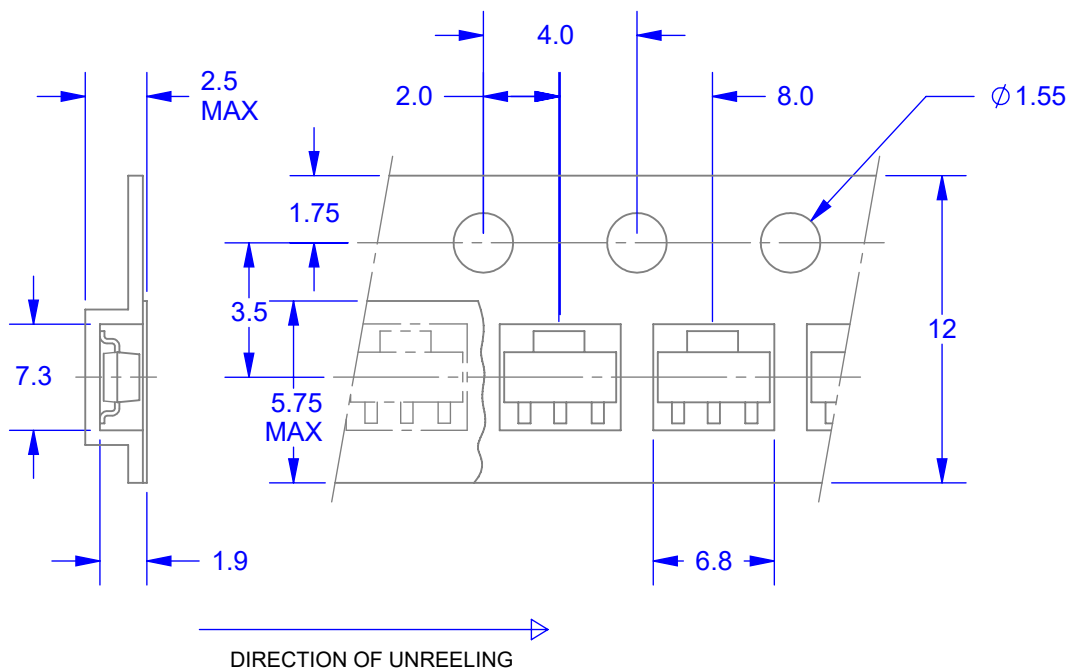
PART NUMBER	SHORTED PINS	NOTES	RoHS Pb-FREE	MSL LEVEL	HALOGEN FREE	TOP MARK
SOT223E7A-T-ISO	2 ~ 2	ISOLATED	YES	1	YES	ISO
SOT223E7A-T-DC13H	1-3	1-WIRE	YES	1	YES	13H
SOT223E7A-T-DC23H	2-3	1-WIRE	YES	1	YES	23H
SOT223E7A-T-DC123H	1-2-3	2-WIRES	YES	1	YES	123H
SOT223E7A-T-DC124H	1-2	1-WIRE	YES	1	YES	124H

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

<b>TopLine</b> <sup>®</sup>			
TITLE SOT223 JUMPER ZERO OHM RESISTORS			
SCALE NONE	SIZE A	DRAWING NO. 120223	REV A
DO NOT SCALE DRAWING			SHEET 4 OF 7

**TAPE SPECIFICATION FOR SOT-223  
SURFACE MOUNT DEVICE**

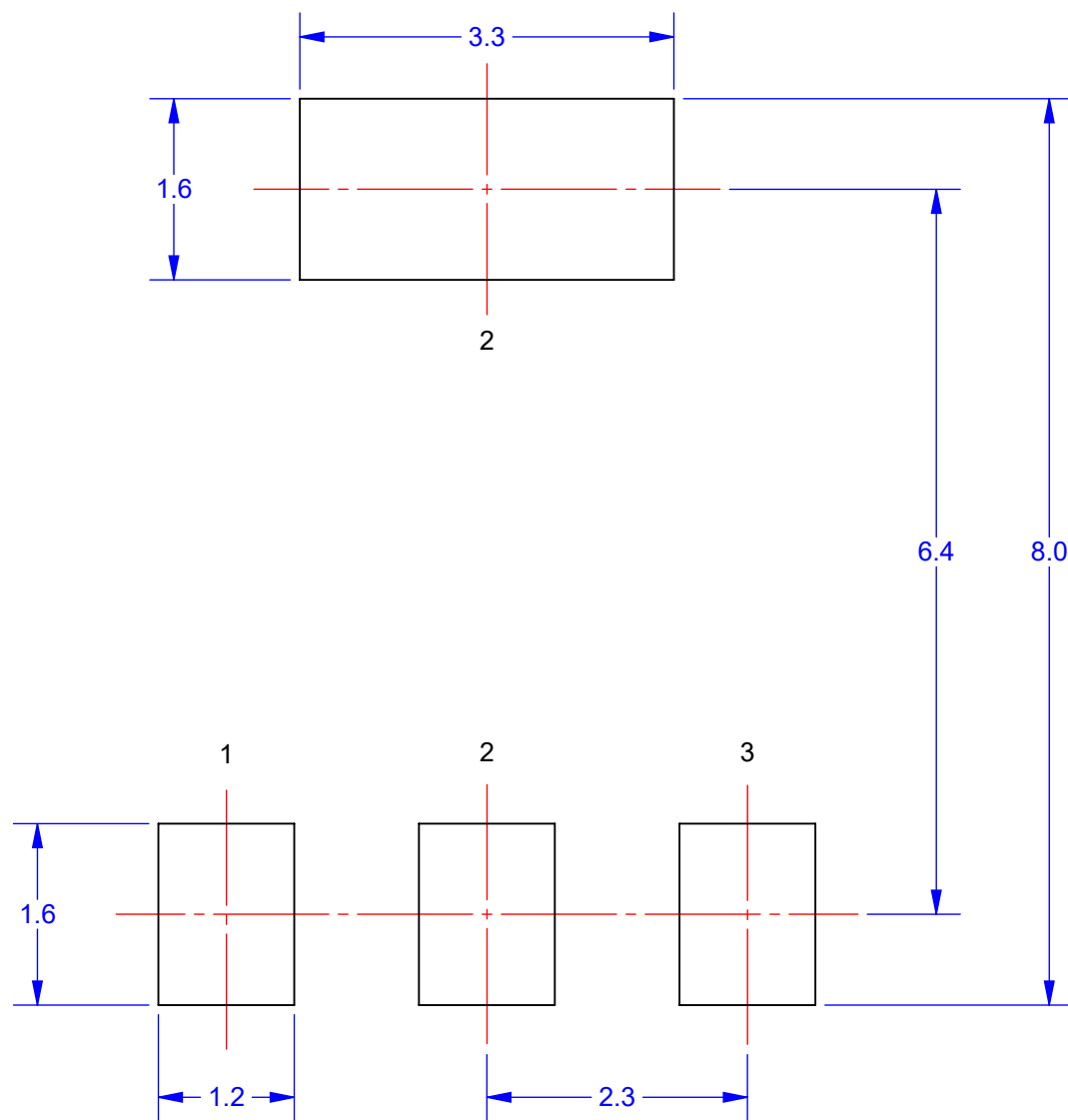
**SOT-223 PACKAGE REEL**



ALL DIMENSIONS IN mm

<b>TopLine</b> <sup>®</sup>			
TITLE SOT223 JUMPER ZERO OHM RESISTORS			
SCALE NONE	SIZE A	DRAWING NO. 120223	REV A
DO NOT SCALE DRAWING		SHEET 5 OF 7	

# PC BOARD LAND PATTERN



Notes: (Unless Otherwise Specified).

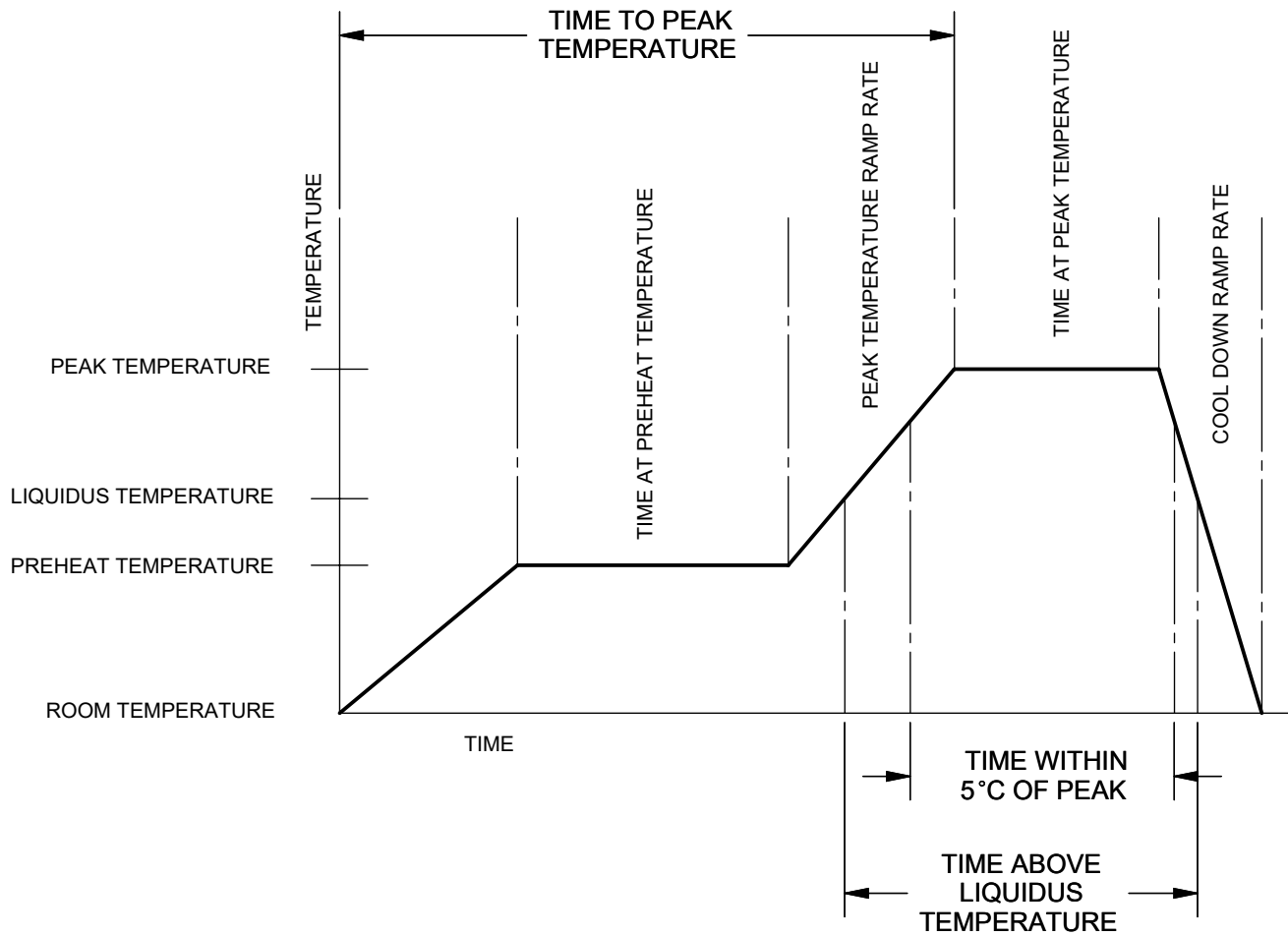
1) DIMENSIONS IN mm.

2) PCB BOARD DIMENSIONS ARE PRESENTED ONLY AS A GUIDELINE.

DESIGNERS SHOULD USE THEIR OWN EXPERIENCE WHEN DESIGNING PCB.

<b>TopLine</b> <sup>®</sup>			
TITLE		SOT223 JUMPER ZERO OHM RESISTORS	
SCALE	SIZE	DRAWING NO.	REV
20:1	A	120223	A
DO NOT SCALE DRAWING			SHEET 6 OF 7

# 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

<b>TopLine</b> ®			
TITLE     SOT223 JUMPER ZERO OHM RESISTORS			
SCALE 1:1	SIZE A	DRAWING NO. 120223	REV A
DO NOT SCALE DRAWING		SHEET 7 OF 7	