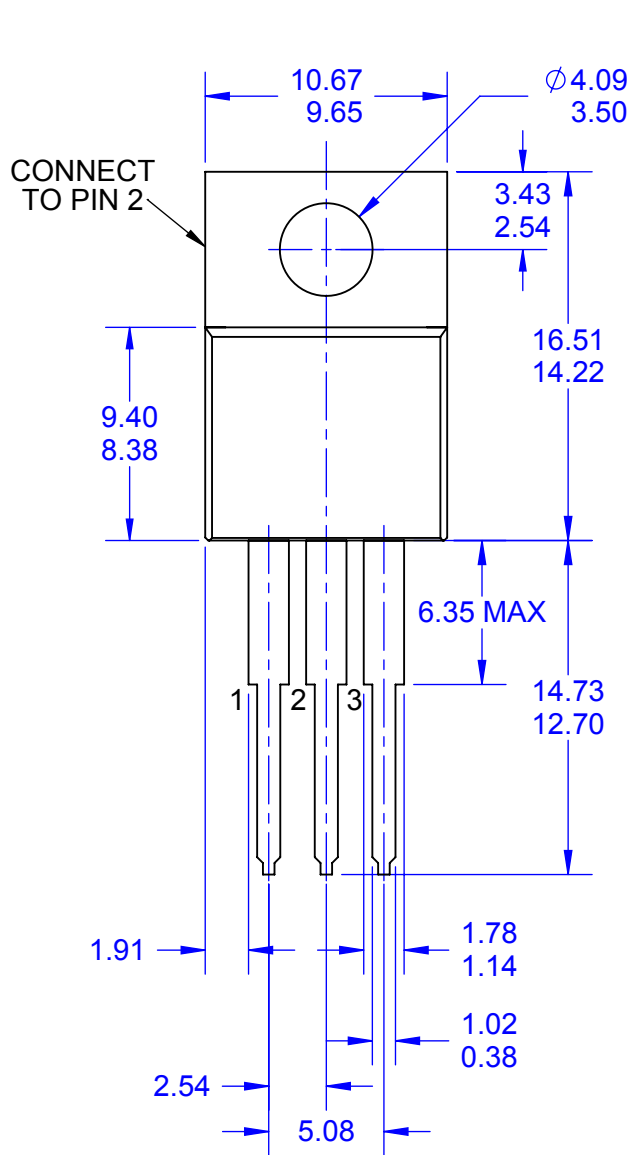
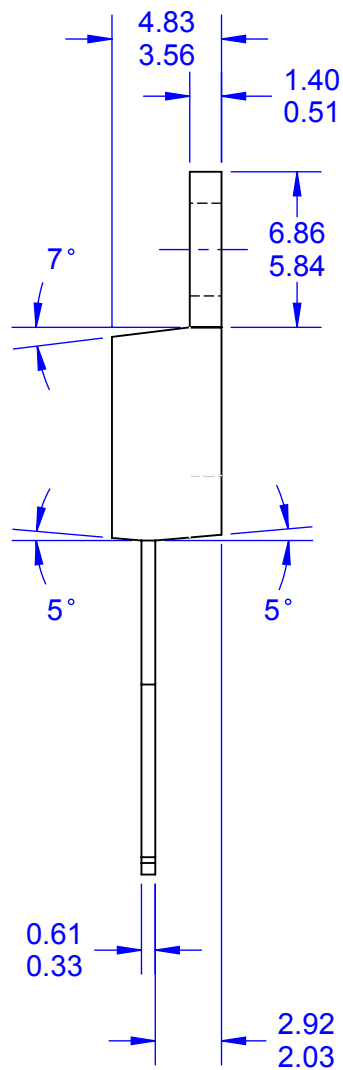


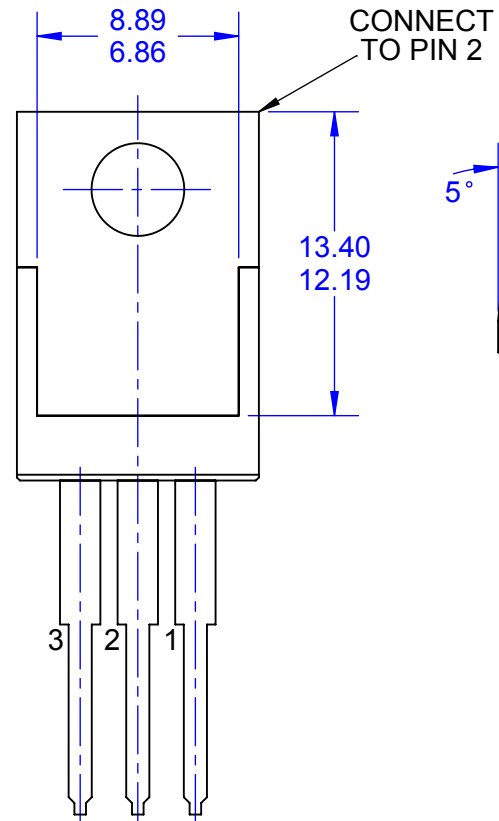
**TOP VIEW**



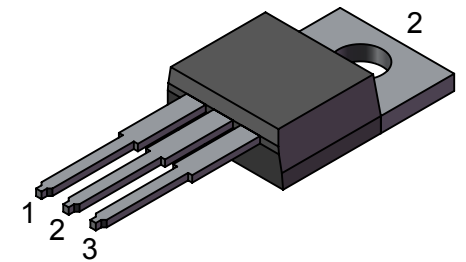
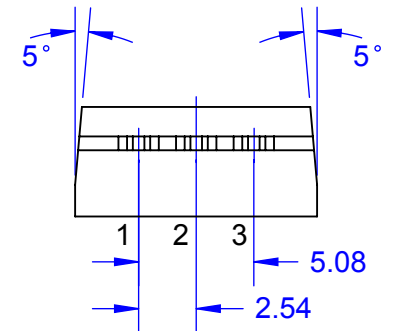
**SIDE VIEW**



**BOTTOM VIEW**



**END VIEW**

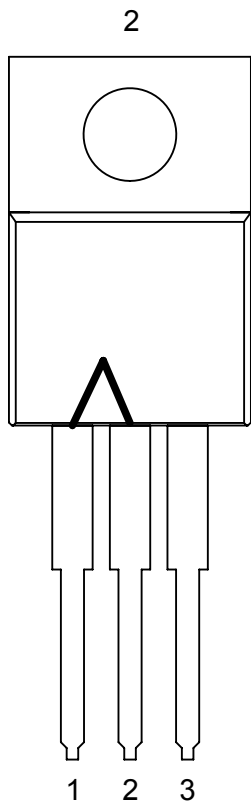


NOTES: (Unless Otherwise Specified).

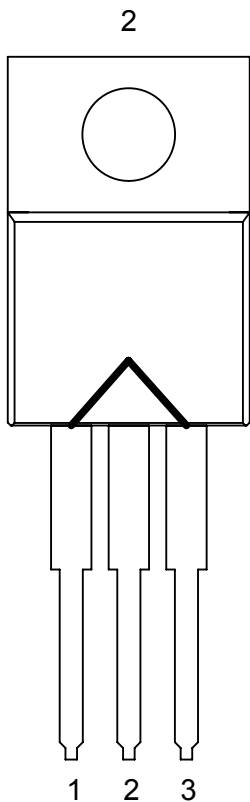
- 1) DIMENSIONS IN mm.
- 2) SEE DAISY CHAIN JUMPER DIAGRAMS (PAGE 2).
- 3) SEE PART NUMBER CONFIGURATION (PAGE 5).

APPROVALS	DATE	<b>TopLine®</b>			
DRAWN T.Au	05/13/13				
ENG M. Hart	05/13/13	TITLE TO-220 JUMPER AND ISOLATED			
MFG		SCALE 3:1	SIZE A	DRAWING NO. 120220	REV A
QA		DO NOT SCALE DRAWING			SHEET 1 OF 7
CUST					
REVISED					

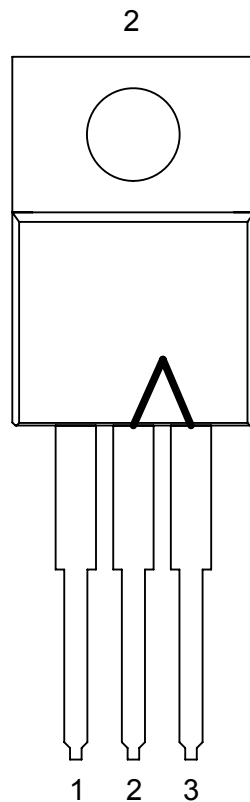
**INTERNAL WIRING CIRCUIT (JUMPER)  
DAISY CHAIN PART NUMBER SUFFIX  
TOP VIEW**



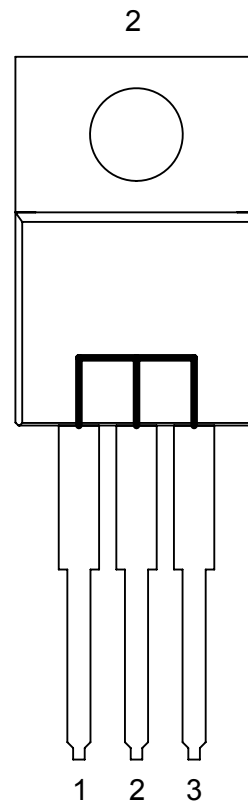
DC12  
1-WIRE



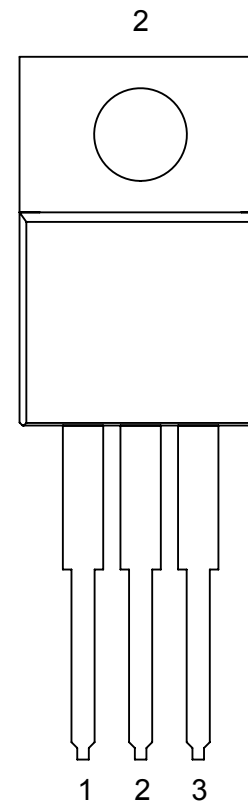
DC13  
1-WIRE



DC23  
1-WIRE



DC123  
2-WIRE

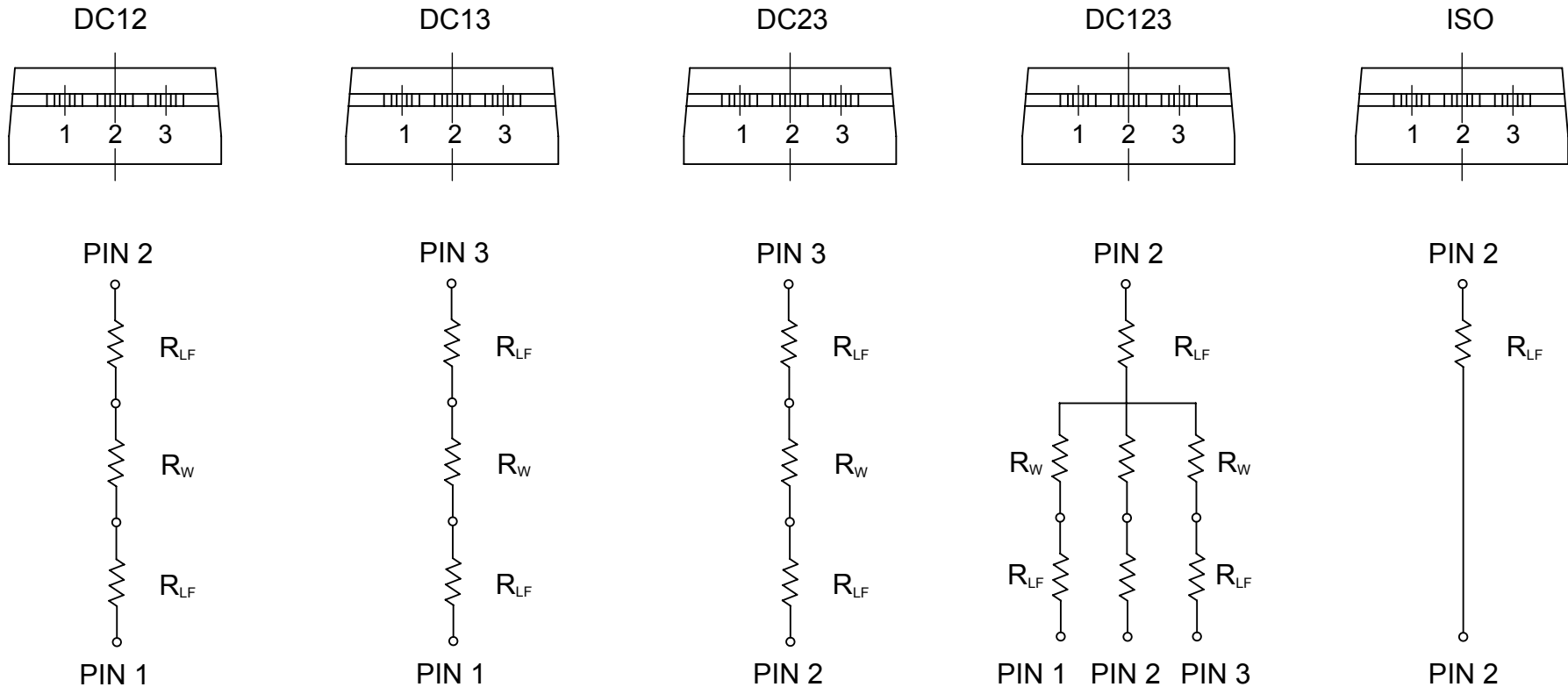


-ISO  
NO WIRES

NOTE:  
1) EXPOSED METAL HEAT SINK IS CONNECTED TO PIN 2.

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## SCHEMATIC EQUIVALENT INTERNAL CIRCUIT



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

ELECTRICAL RESISTANCE MILLIOHM (DC) MAX			
CIRCUIT	PIN 1 TO 2	PIN 1 TO 3	PIN 2 TO 3
DC12	50 mΩ	OPEN	OPEN
DC13	OPEN	50 mΩ	OPEN
DC23	OPEN	OPEN	50 mΩ
DC123	50 mΩ	50 mΩ	50 mΩ
ISO	OPEN	OPEN	OPEN

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## ELECTRICAL AND THERMAL

<b>TEMPERATURE RATING</b>	
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

<b>MAXIMUM ELECTRICAL (DC) RATING</b>	
WORKING VOLTAGE	500 V
CURRENT RATING	3 A
POWER @ 25°C	5 W

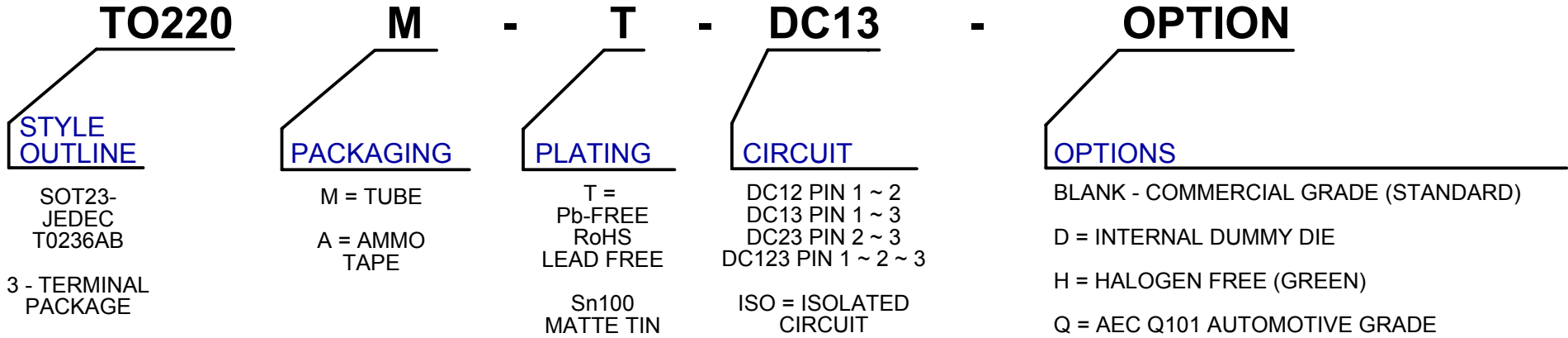
<b>THERMAL RESISTANCE</b>	
MAX THERMAL RESISTANCE JUNCTION TO CASE	1.1°C/W

NOTES: (Unless Otherwise Specified).

- 1) DIMENSIONS IN mm.
- 2) SEE DAISY CHAIN JUMPER DIAGRAMS (PAGE 2).
- 3) SEE PART NUMBER CONFIGURATION (PAGE 5).

<b>TopLine®</b>			
TITLE		TO-220 JUMPER AND ISOLATED	
SCALE	SIZE	DRAWING NO.	REV
	A	120220	A
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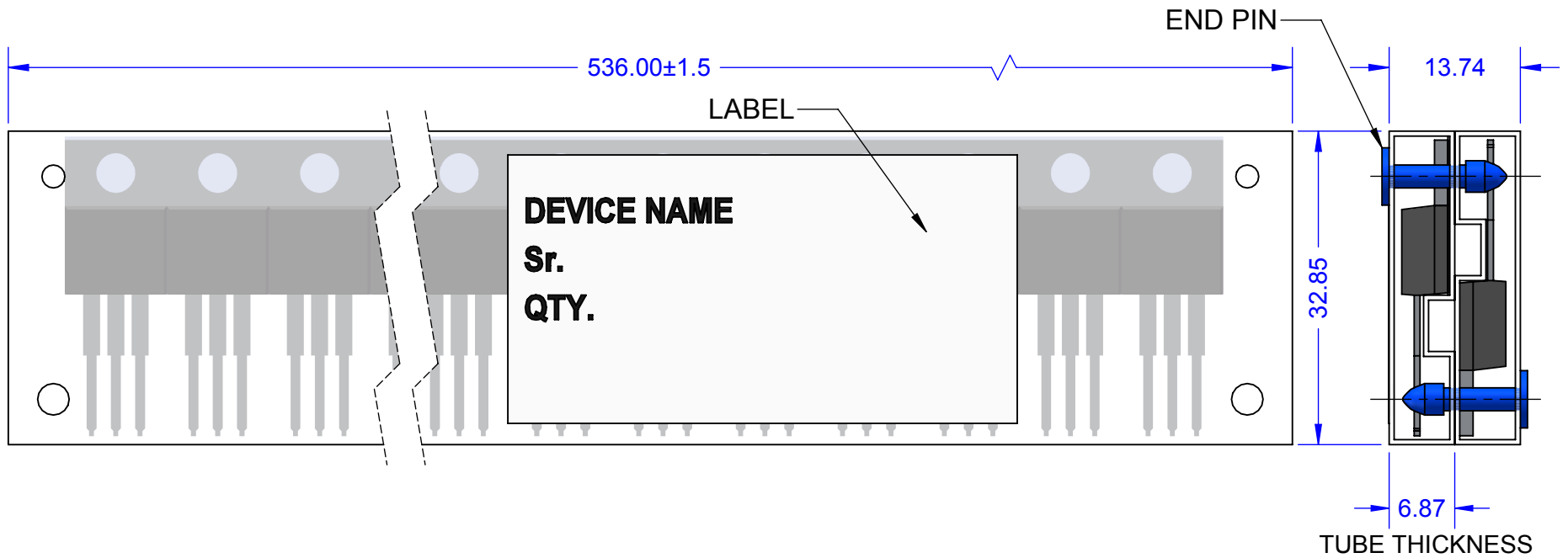
## PART NUMBERING SYSTEM



PART NUMBER	SHORTED PINS	NOTES	RoHS Pb-FREE	MSL LEVEL	HALOGEN FREE	GRADE	TOP MARK
TO220M-T	N/A	DUMMY	YES	3	NO	COMMERCIAL	N/A
TO220M-T-ISO	NONE	FULLY ISOLATED	YES	3	NO	COMMERCIAL	ISO
TO220M-T-DC12	1 ~ 2	1-WIRE	YES	3	NO	COMMERCIAL	DC12
TO220M-T-DC13	1 ~ 3	1-WIRE	YES	3	NO	COMMERCIAL	DC13
TO220M-T-DC23	2 ~ 3	1-WIRE	YES	3	NO	COMMERCIAL	DC23
TO220M-T-DC123	1 ~ 2 ~ 3	2-WIRES	YES	3	NO	COMMERCIAL	DC123

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SCALE	SIZE A	DRAWING NO. 120220	REV A
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# TO-220 TUBE PACKING



ALL DIMENSIONS IN mm

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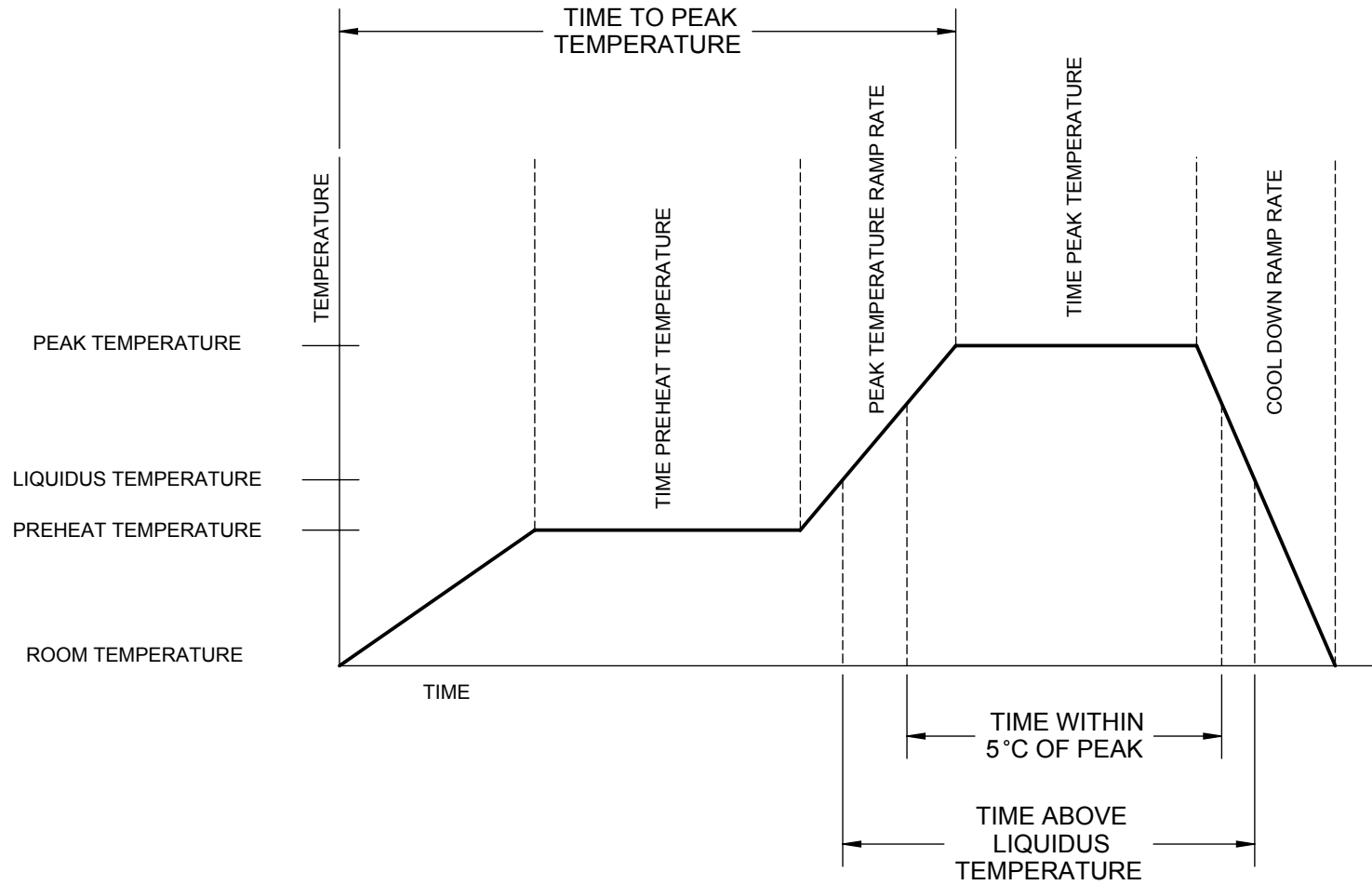
TITLE TO-220  
JUMPER AND ISOLATED

SCALE	SIZE A	DRAWING NO. 120220	REV A
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SHEET 6 OF 7

# LEAD FREE REFLOW PROFILE



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 WITHIN 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		TO-220 JUMPER AND ISOLATED	
SCALE	SIZE	DRAWING NO.	REV
	A	120220	A
DO NOT SCALE DRAWING			SHEET 7 OF 7