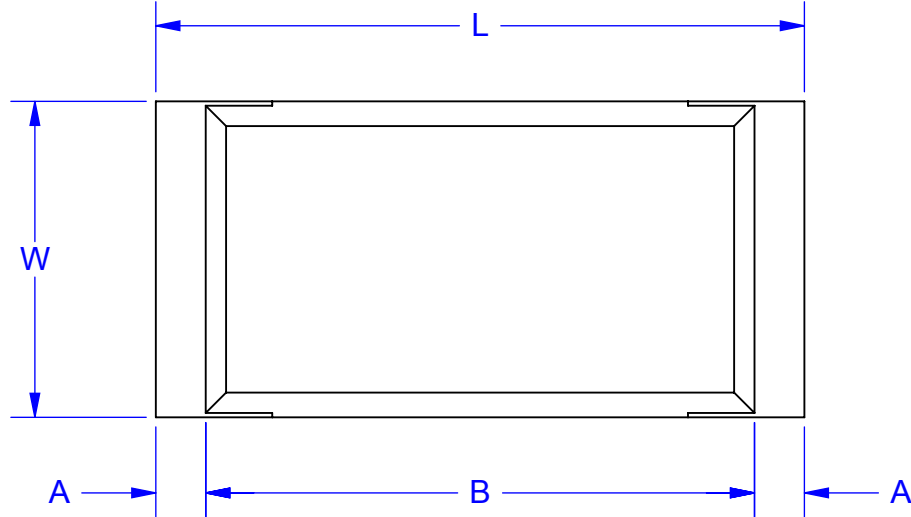


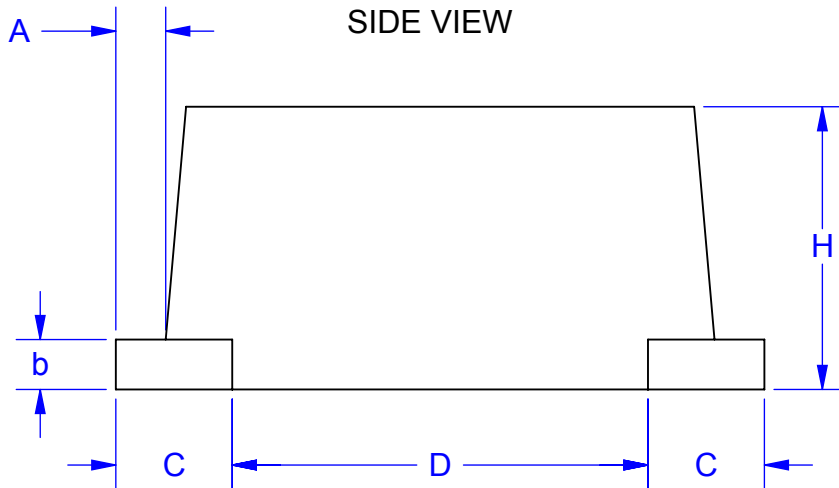
# FLAT LEAD OUTLINE

TOP VIEW

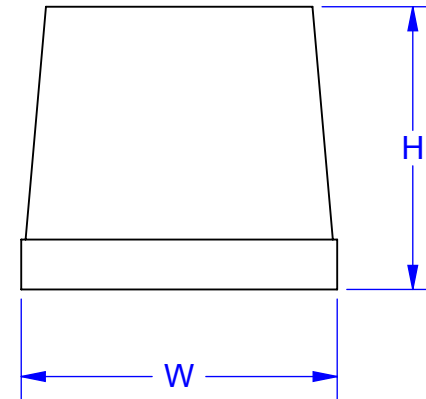


DIMENSION TABLE	
PART SERIES	SMC-F
CROSS REF	SOD15
JEDEC REF	DO-214AB
L	6.3 - 6.9
W	4.2 - 4.8
H	1.9 - 2.5
A	0.3 TYP
B	5.7 - 6.3
C	1.2 TYP
D	3.9 - 4.5
b	0.4
SPACER - REF	FM30N
JUMPER - REF	FM330S

SIDE VIEW




END VIEW

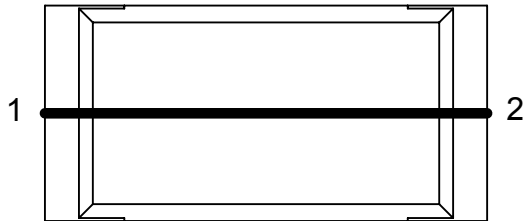


Notes: (Unless Otherwise Specified).

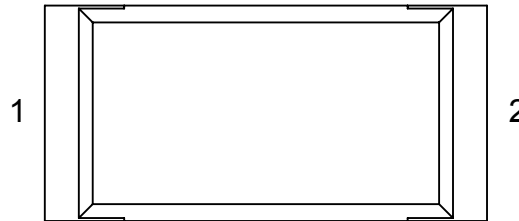
- 1) DIMENSIONS IN mm.
- 2) SEE JUMPER AND SPACER DIAGRAMS (PAGE 2).
- 3) SEE PART NUMBER CONFIGURATION (PAGE 4).
- 4) RECOMMENDED PC BOARD LAYOUT PATTERN (PAGE 6).
- 5) MOUNTING POSITION: ANY (NON-POLARIZED).
- 6) CASE: UL94-V RATED FLAME RETARDANT.

APPROVALS	DATE				
DRAWN T.Au	12/11/13				
ENG M. Hart	12/11/13	TITLE SMC-F FLAT LEAD JUMPER AND SPACER			
MFG					
QA		SCALE 22:1	SIZE A	DRAWING NO. 121303	REV A
CUST		DO NOT SCALE DRAWING			SHEET 1 OF 7
REVISED					

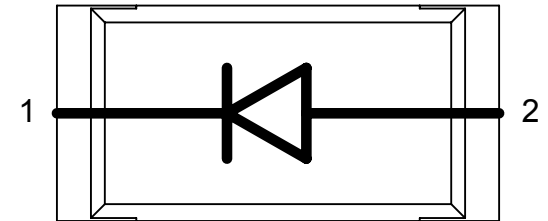
INTERNAL WIRING CIRCUIT  
PART NUMBER SUFFIX  
TOP VIEW



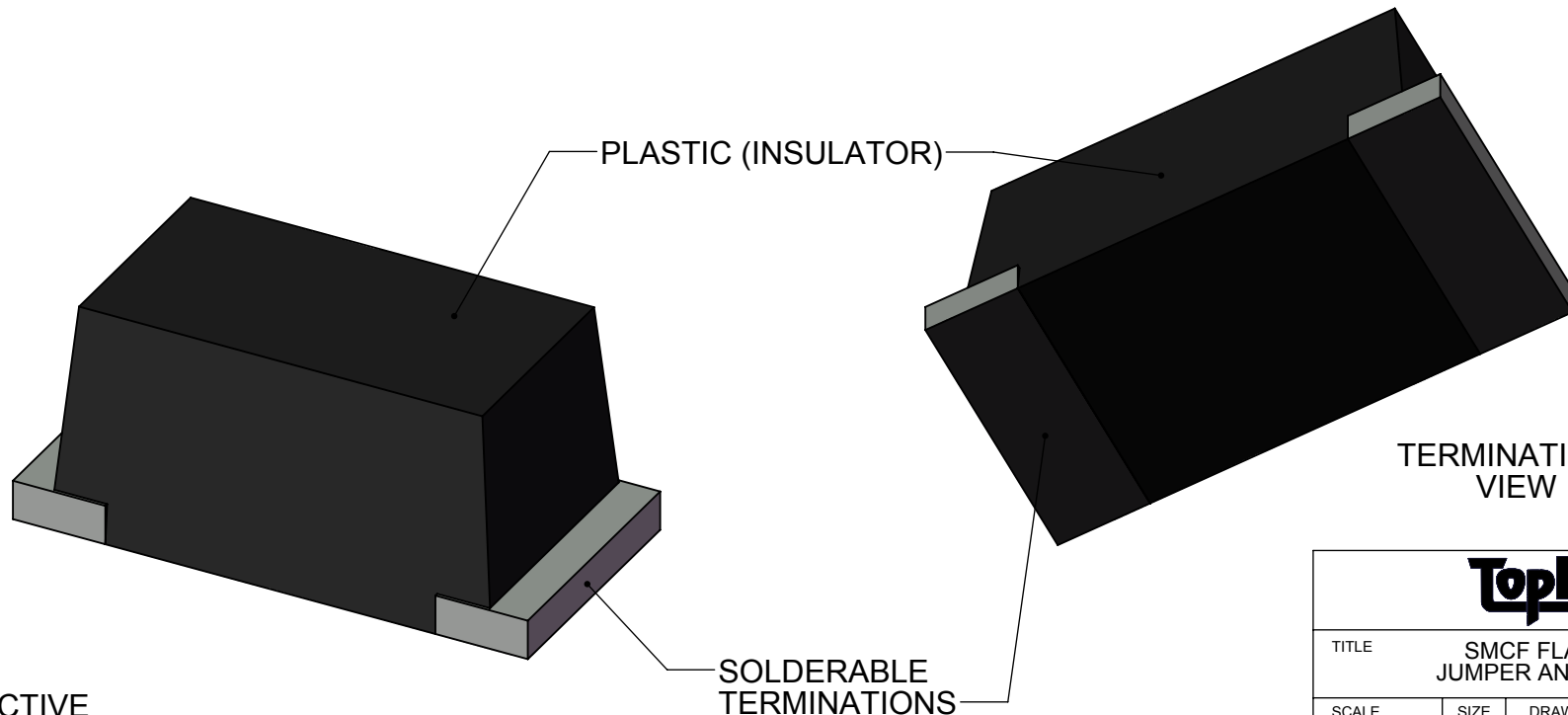
**DC12**  
1-WIRE  
CIRCUIT JUMPER



**ISO**  
NO CONNECTION  
FULLY ISOLATED  
NON-CONDUCTIVE SPACER



**BLANK SUFFIX**  
UNDEFINED CIRCUIT  
DUMMY

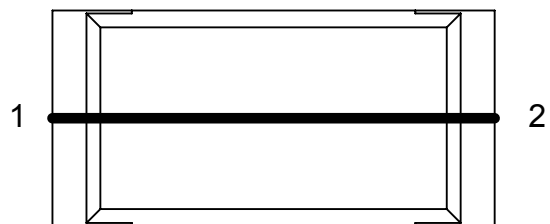


PERSPECTIVE  
VIEW

TERMINATIONS  
VIEW

<b>TopLine®</b>			
TITLE SMCF FLAT LEAD JUMPER AND SPACER			
SCALE 20:1	SIZE A	DRAWING NO. 121303	REV A
DO NOT SCALE DRAWING			SHEET 2 OF 7

**SCHEMATIC EQUIVALENT INTERNAL CIRCUIT**

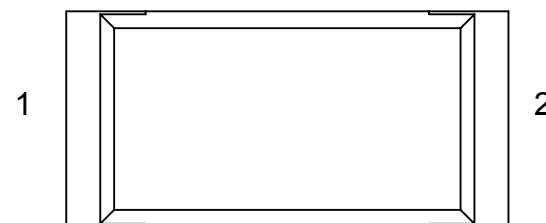


**DC12**  
(SHORT CIRCUIT)



ELECTRICAL RESISTANCE MILIOHM (DC) MAX	
CIRCUIT	PIN 1 TO PIN 2
DC12	< 1.0 milli $\Omega$

**SCHEMATIC EQUIVALENT INTERNAL CIRCUIT**



**ISOLATED CIRCUIT**  
NO CONNECTIONS



INSULATION RESISTANCE GIGA OHM (DC) MIN	
CIRCUIT	PIN 1 TO PIN 2
ISO	> 10 G $\Omega$

MAXIMUM ELECTRICAL (DC) RATING	PART TYPE
	SMC-F
V <sub>R</sub> WORKING VOLTAGE	1000V
V <sub>F</sub> FORWARD @ RATED CURRENT	< 0.2V
I <sub>o</sub> FORWARD CURRENT	3.0 A
I <sub>FSM</sub> FORWARD SURGE CURRENT	100 A
I <sub>r</sub> REVERSE CURRENT	3.0 A
C <sub>J</sub> JUNCTION CAPACITANCE	40 pF

THERMAL RESISTANCE	PART TYPE
	SMC-F
JUNCTION TO AMBIENT (T <sub>a</sub> =25°) R <sub>th(j-a)</sub>	47°C/W

TEMPERATURE RATING	
JUNCTION TEMP T <sub>J</sub>	150°C
STORAGE TEMP T <sub>stg</sub>	-65°C TO 150°C
PEAK REFLOW TEMP T <sub>reflow</sub> 10 SECONDS	260°C

**TopLine®**

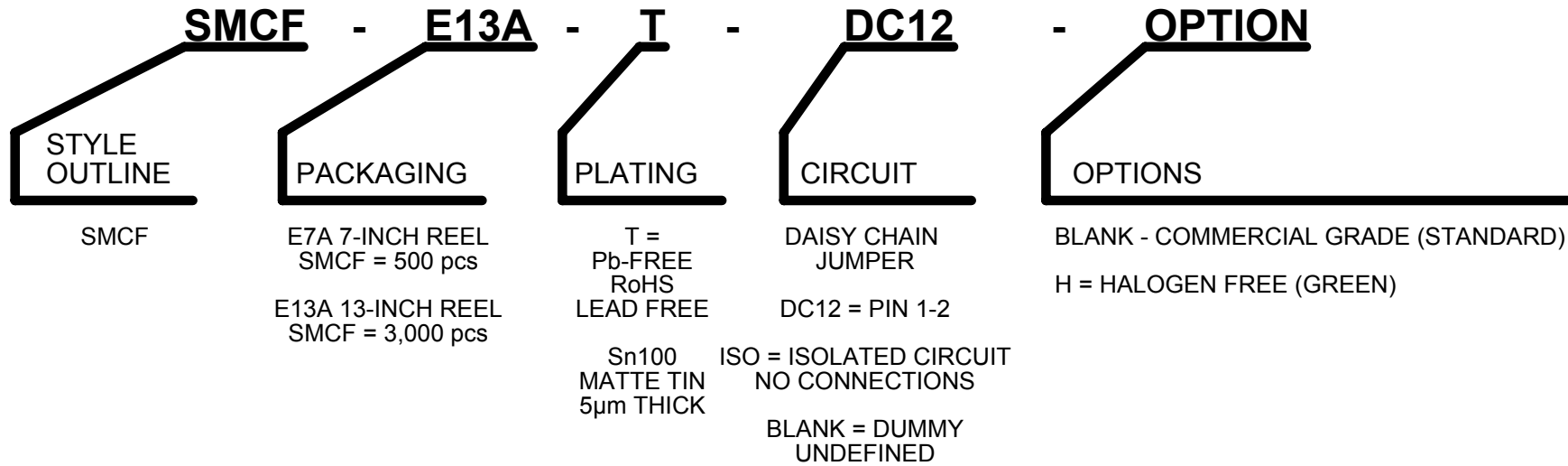
TITLE SMC-F FLAT LEAD JUMPER AND SPACER

SCALE 15:1	SIZE A	DRAWING NO. 121303	REV A
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DO NOT SCALE DRAWING

SHEET 3 OF 7

# PART NUMBERING SYSTEM



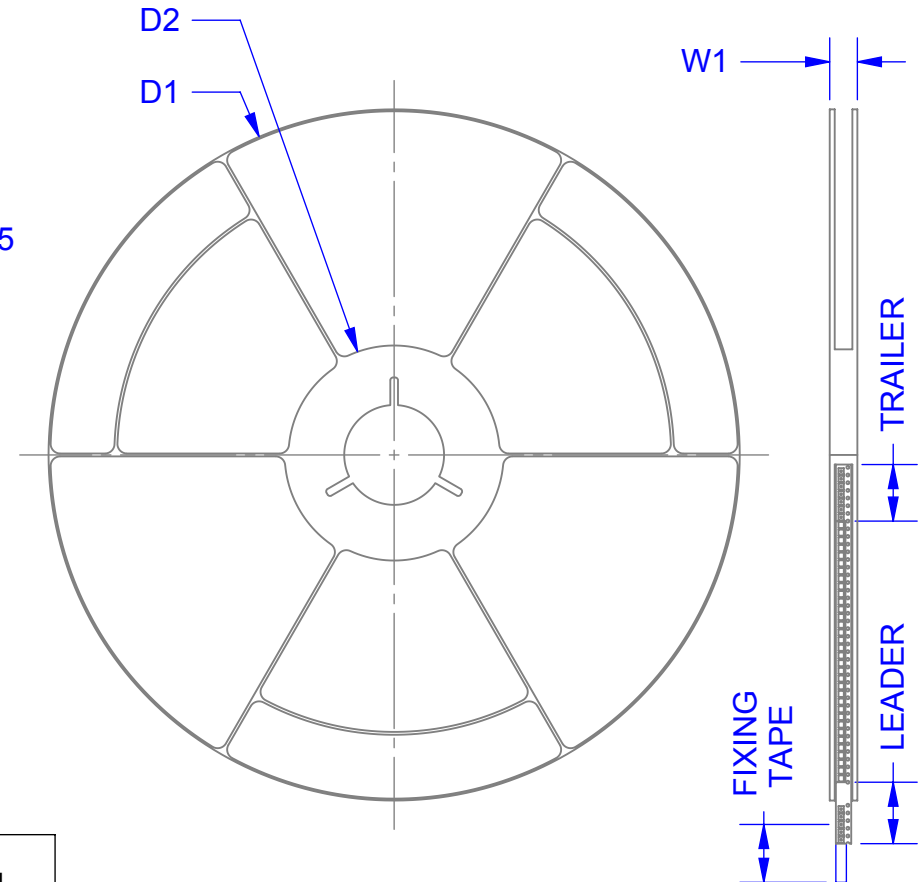
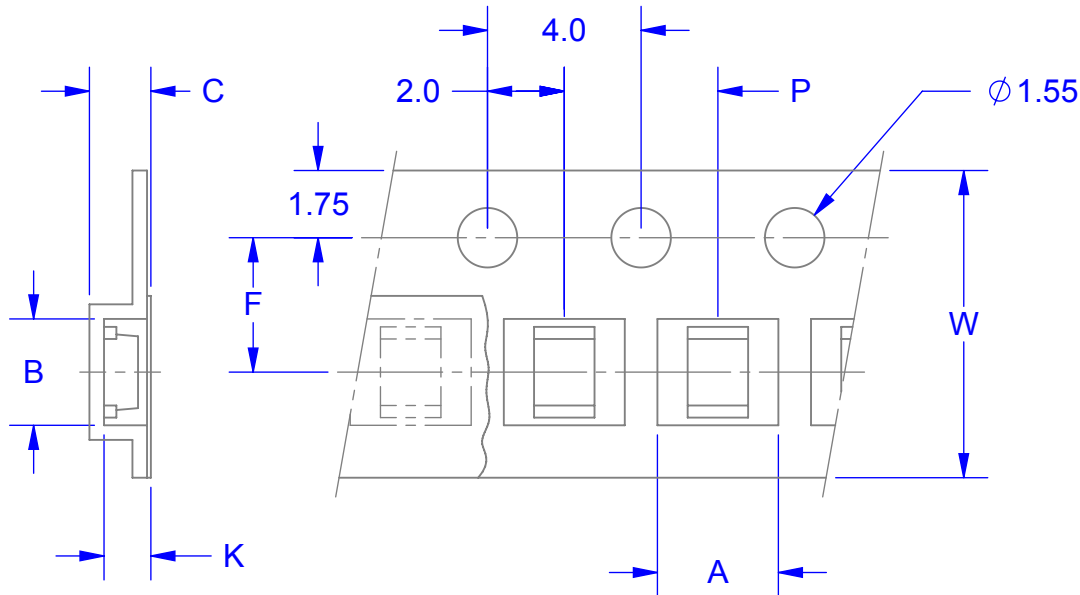
OUTLINE	REEL QTY	NOTES	RoHS	MSL LEVEL	HALOGEN FREE	APPLICATION	TOP MARK	REF	DP#
SMCF-E7A-T-DC12	500	SHORTED	YES	1	NO	JUMPER	SC	FM30S	151043
SMCF-E13A-T-DC12	3000	SHORTED	YES	1	NO	JUMPER	SC	FM30S	158061
SMCF-E7A-T-ISO	500	OPEN CIRCUIT	YES	1	NO	SPACER	NC	FM30N	140155
SMCF-E13A-T-ISO	3000	OPEN CIRCUIT	YES	1	NO	SPACER	NC	FM30N	167024

OPTIONAL: HALOGEN FREE AVAILABLE (ADD SUFFIX "H").

<b>TopLine®</b>			
TITLE SMCF FLAT LEAD JUMPER AND SPACER			
SCALE 25:1	SIZE A	DRAWING NO. 121303	REV A
DO NOT SCALE DRAWING			SHEET 4 OF 7

TAPE SPECIFICATION  
SURFACE MOUNT DEVICE

7 AND 13 INCH PACKAGE REEL



DIRECTION OF UNREELING → PARTS ARE NON-POLARIZED

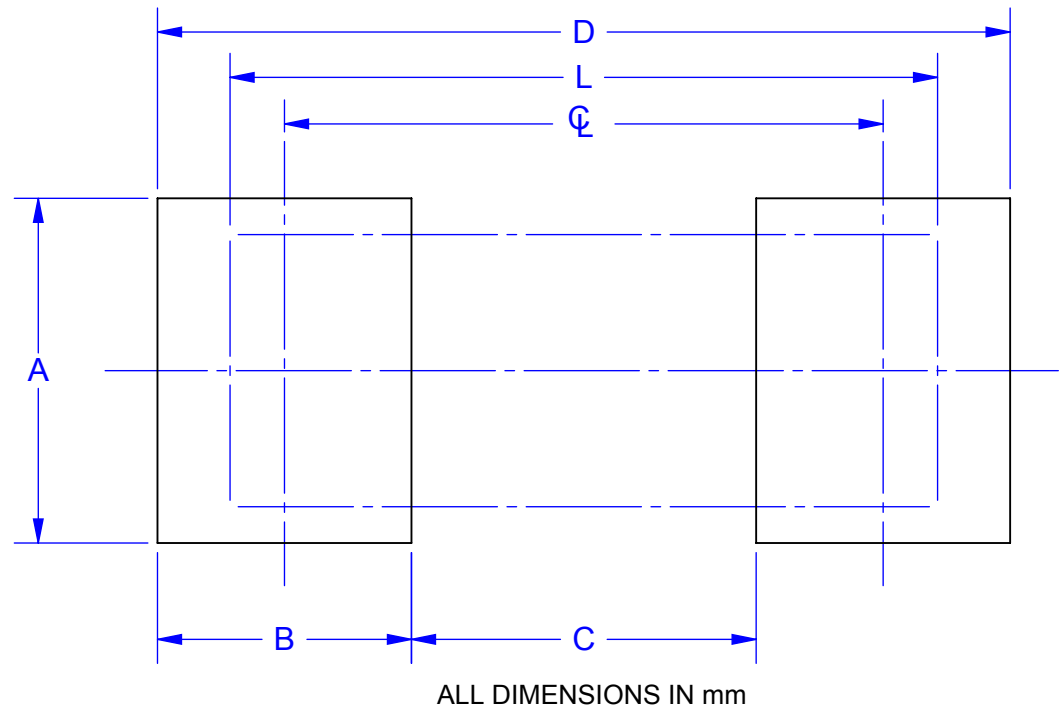
TAPE AND REEL DIMENSIONS		E7A 7-INCH	E13A 13-INCH
	SYMBOL	SMCF	SMCF
TAPE WIDTH	W	12	12
PITCH OF COMPONENTS	P	8	8
POCKET WIDTH	A	5.1	5.1
POCKET LENGTH	B	7.20	7.20
POCKET DEPTH	K	2.50	2.50
CARRIER THICKNESS	C	2.73	2.73
REEL DIAMETER	D1	330	330
HUB DIAMETER	D2	50	50
PUNCH HOLE POSITION	F	5.5	5.5
MAX REEL WIDTH	W1	18	18
REF (JUMPER)	-	FM30S	FM30S
REF (SPACER)	-	FM30N	FM30N
QUANTITY (PSC)	-	500	3000

ALL DIMENSIONS IN mm.

<b>TopLine®</b>			
TITLE		SMCF FLAT LEAD JUMPER AND SPACER	
SCALE	SIZE	DRAWING NO.	REV
1:1	A	121303	A
DO NOT SCALE DRAWING			SHEET 5 OF 7

# PC BOARD LAND PATTERN


PCB PAD DIMENSIONS	
SYMBOL	SMCF
A	4.80
B	1.60
C	4.60
D	7.80
ϕ	6.2
L	6.3 - 6.9
REF JUMPER	FM30S
REF SPACER	FM30N



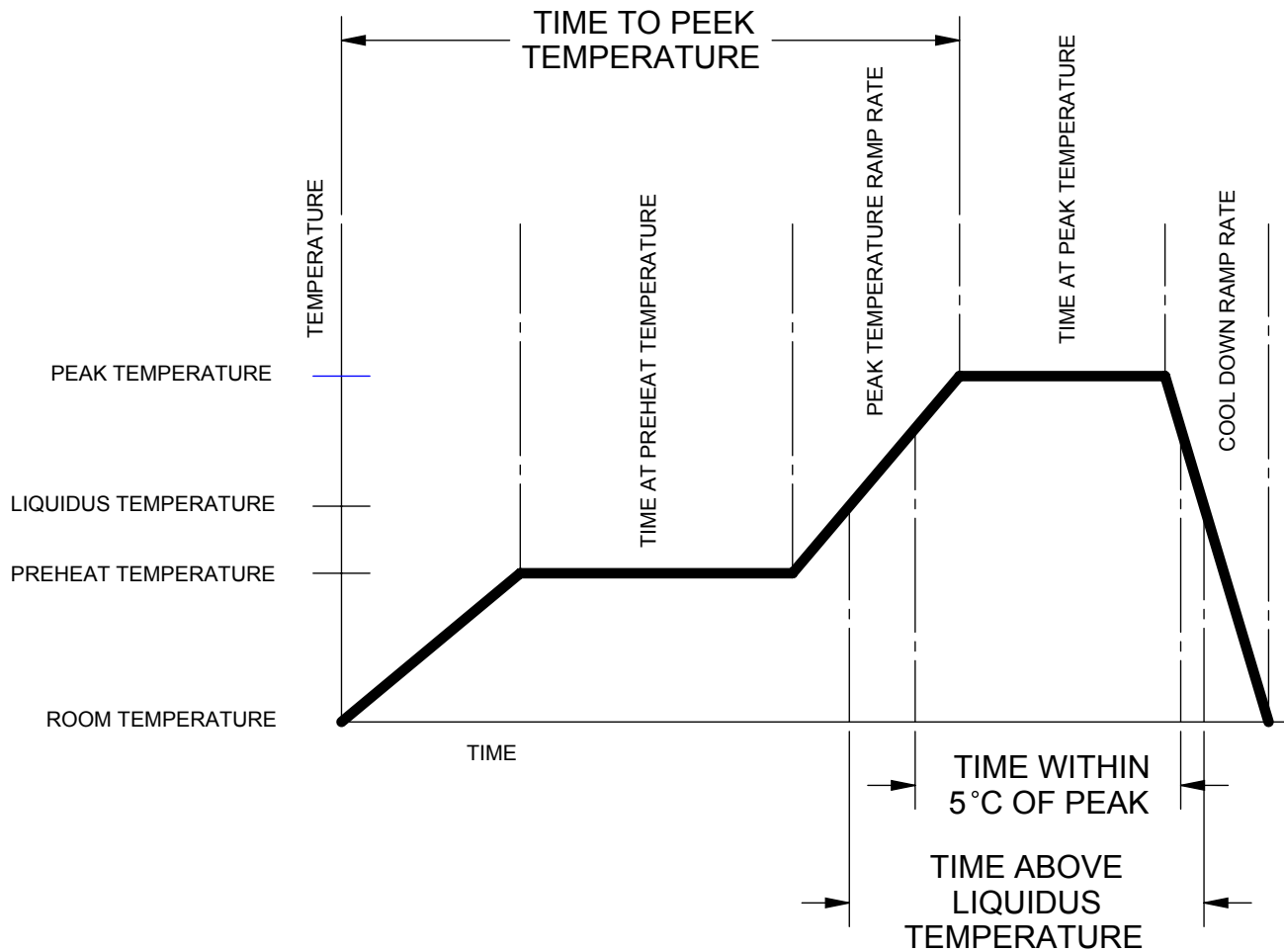
Notes: (Unless Otherwise Specified).

1) DIMENSIONS IN mm.

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

			
TITLE		SMCF FLAT LEAD JUMPER AND SPACER	
SCALE	SIZE	DRAWING NO.	REV
24:1	A	121303	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 120 SECONDS
RAMP TO PEAK	3°C /SECOND MAXIMUM
TIME OVER LIQUIDUS (217°C)	60 TO 260 SECONDS
PEAK TEMPERATURE	260°C +0/-5°C
TIME WITHING 5°C OF PEAK	10 TO 30 SECONDS
RAMP - COOL DOWN	6°C /SECONDS MAXIMUM
TIME 25°C TO PEAK	6 MINUTES MAXIMUM

<b>TopLine®</b>			
TITLE		SMCF FLAT LEAD JUMPER AND SPACER	
SCALE	SIZE	DRAWING NO.	REV
1:1	A	121303	A
DO NOT SCALE DRAWING			SHEET 7 OF 7