

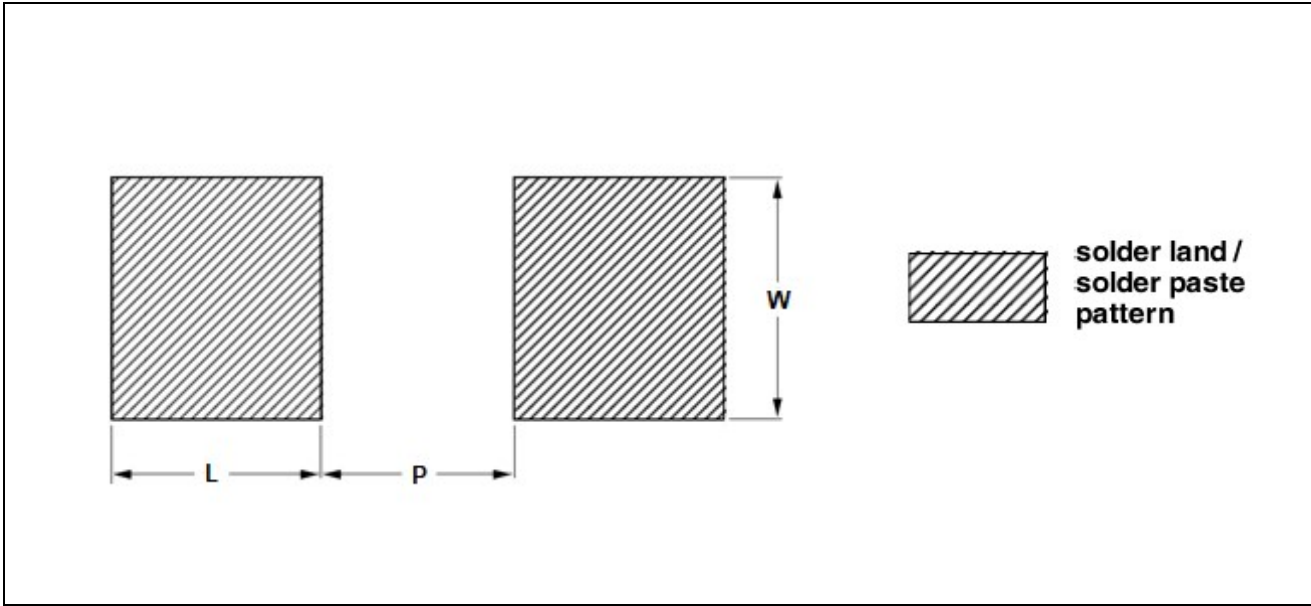
# DATA SHEET

## THROUGH-HOLE&MELF RESISTORS

Recommended soldering profile



**SUGGESTED PAD LAYOUT DIMENSIONS**



Unit: mm

Normal	Miniature	Ultra Miniature	Soldering Mode	L Min.	P	W Min.
MMF-12 MCF-12	MMF25S MCF25S MMS25S		Reflow	1.3	$1.6 \pm 0.1$	1.6
	MMF204 MCF204 MMS204		Wave	1.5	$1.5 \pm 0.1$	1.8
MMF-25 MCF-25	MMF50S MCF50S MMS50S	MMP100 MCP100 MMS100	Reflow	2.0	$3.0 \pm 0.1$	3.0
	MMF207 MCF207		Wave	2.5	$3.0 \pm 0.1$	3.0
MMF-50 MCF-50	MMF1WS MCF1WS	MMP200 MCP200	Reflow	2.3	$5.5 \pm 0.2$	4.0
			Wave	2.8	$5.5 \pm 0.2$	4.0
MWP100	MWP2WS		Reflow	3.0	$4 \pm 0.3$	2.8
			Wave			
MWP200	MWP3WS		Reflow	3.5	$7 \pm 0.3$	3.0
			Wave			
MWP300	MWP5WS		Reflow	3.8	$8.2 \pm 0.3$	3.0
			Wave			

**SOLDERING CONDITIONS**

The graph below represents the recommended wave soldering profile and reflow soldering according to IEC61760-1.

**Reflow soldering profile**

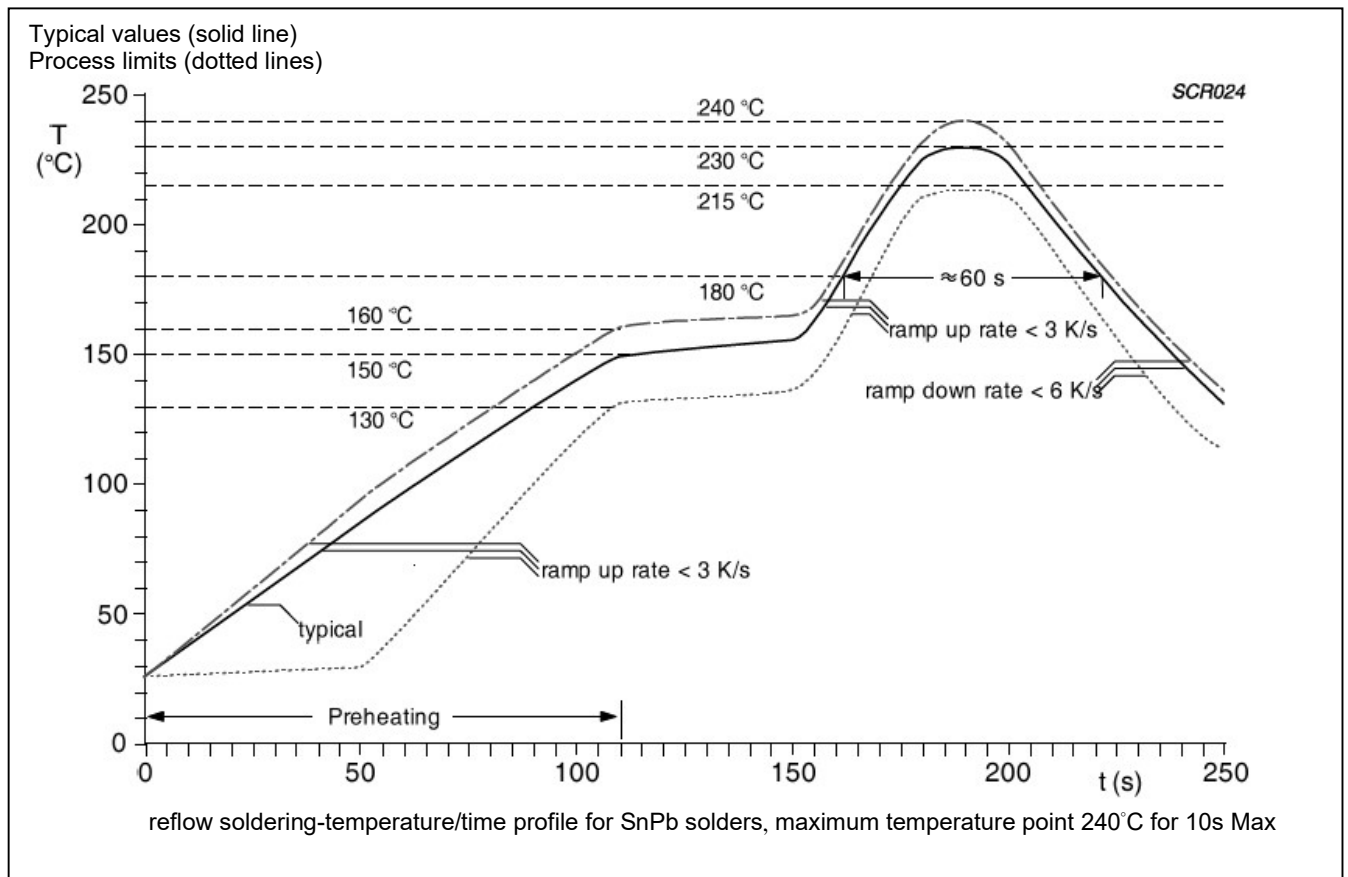
**Suitable for use with surface mount resistors**

**For example: MMF、MMP、MCF、MCP、MWP、MMS**

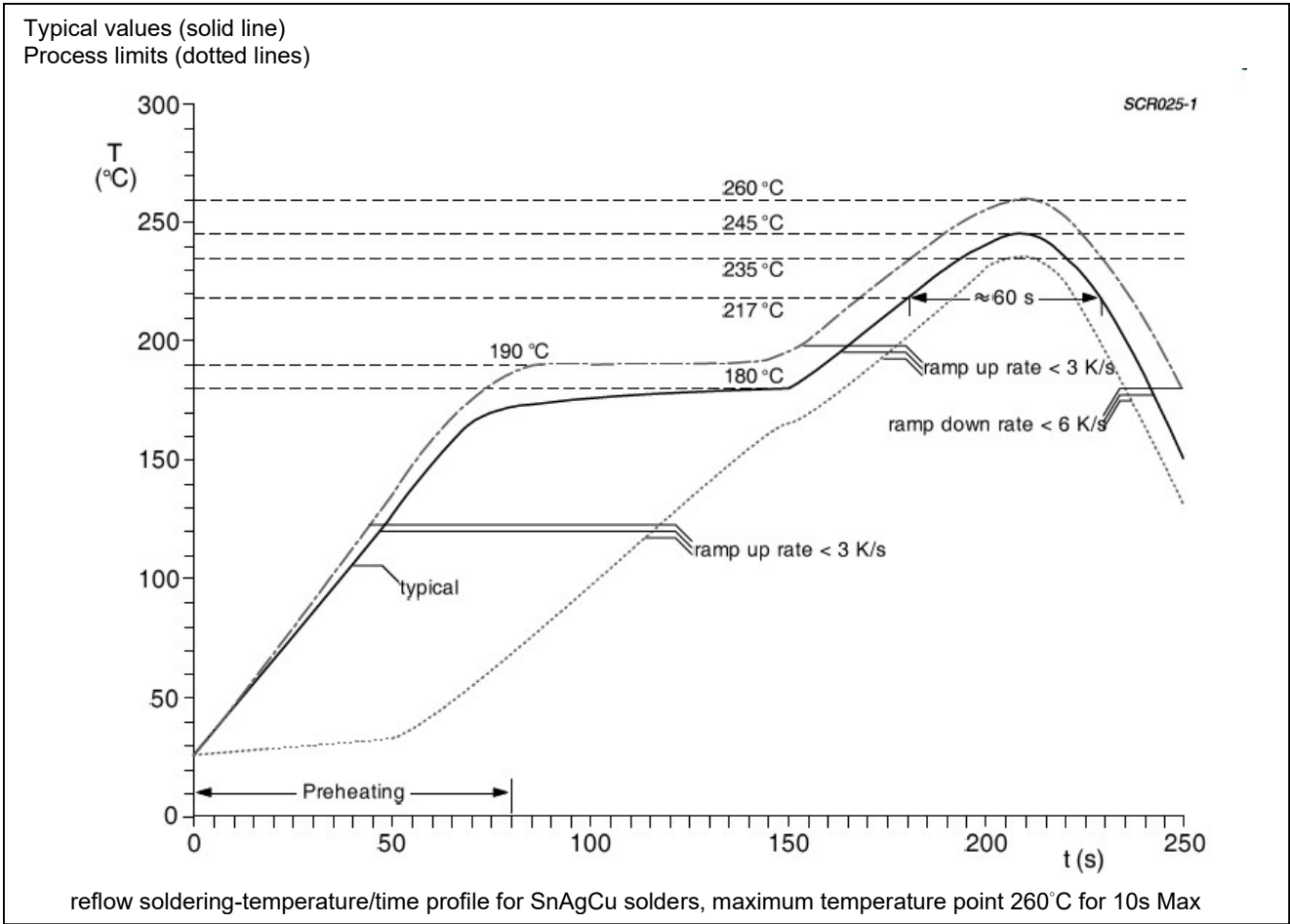
The lead free Surface Mount Resistors are able to stand the reflow soldering conditions as below:

- Temperature: above 220 °C
- Endurance: 95 to 120 seconds
- Cycles: 3 times

**for SnPb solders**



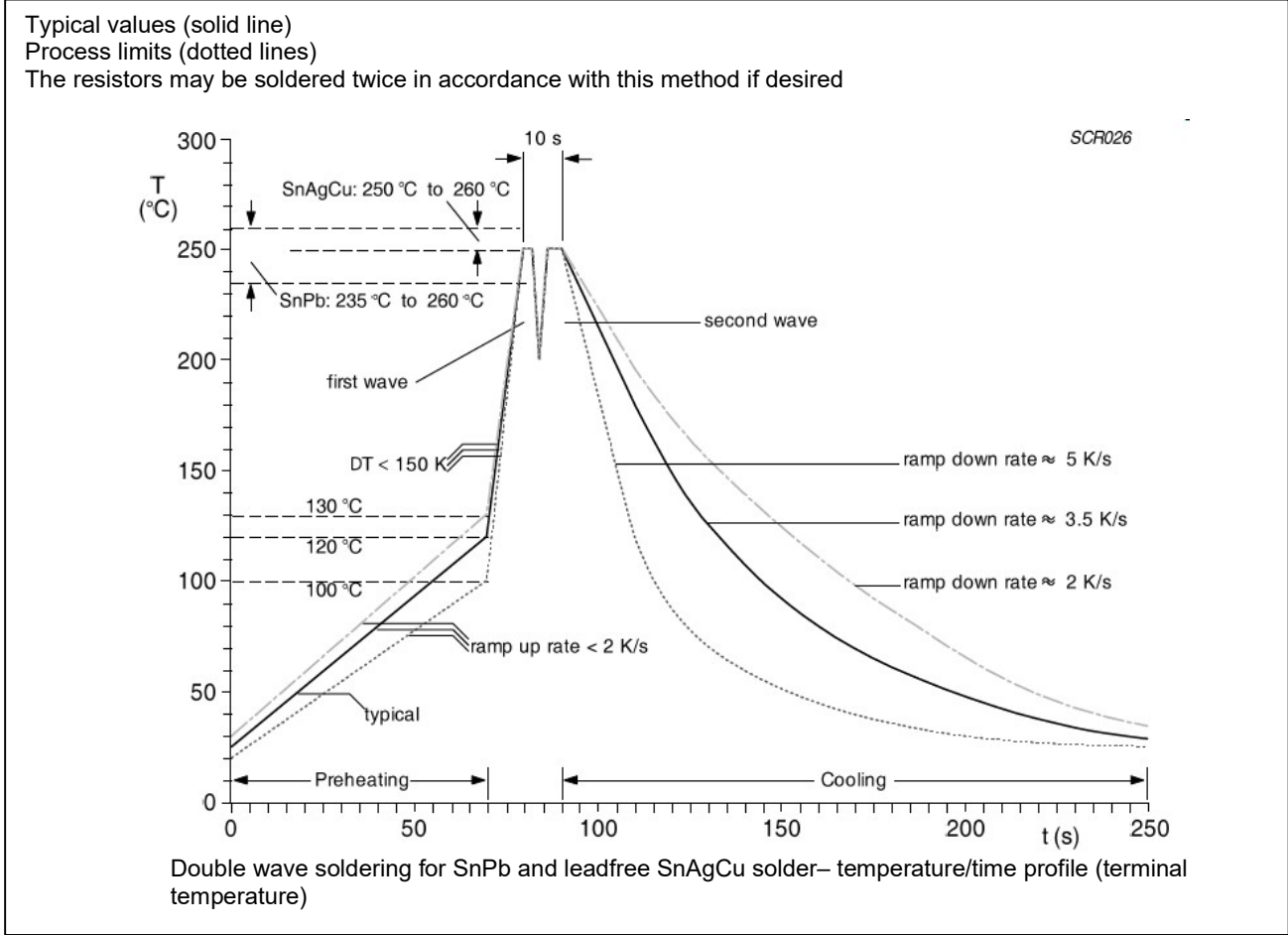
**for SnAgCu solders**



**Wave soldering profile**

Suitable for use with through-hole resistors

for example: MFR、CFR、RSF、HHV、KNP、PNP、FAE、FKN、MCW、SQM、SQG、SQP



**Hand Soldering profile**

Tip temperature when using a soldering iron :350±10°C for 3 s

**REVISION HISTORY**

REVISION	DATE	CHANGE NOTIFICATION	DESCRIPTION
Version 1	Mar. 8, 2024	-	- Add MMS series
Version 0	Jan. 13, 2023	-	- First issue of this specification