

致尊敬的顾客

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2010年4月1日  
瑞萨电子公司

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# 低电压 CMOS 逻辑 IC HD74LV\_A/LVC 系列

## 封装的热阻

### 1. SOP 的热阻

在 HD74LV\_A/LVC 系列中，SOP 的减额曲线如图 1 所示。

此时的热阻 ( $\theta_{j-a}$ ) 如表 1 所示。

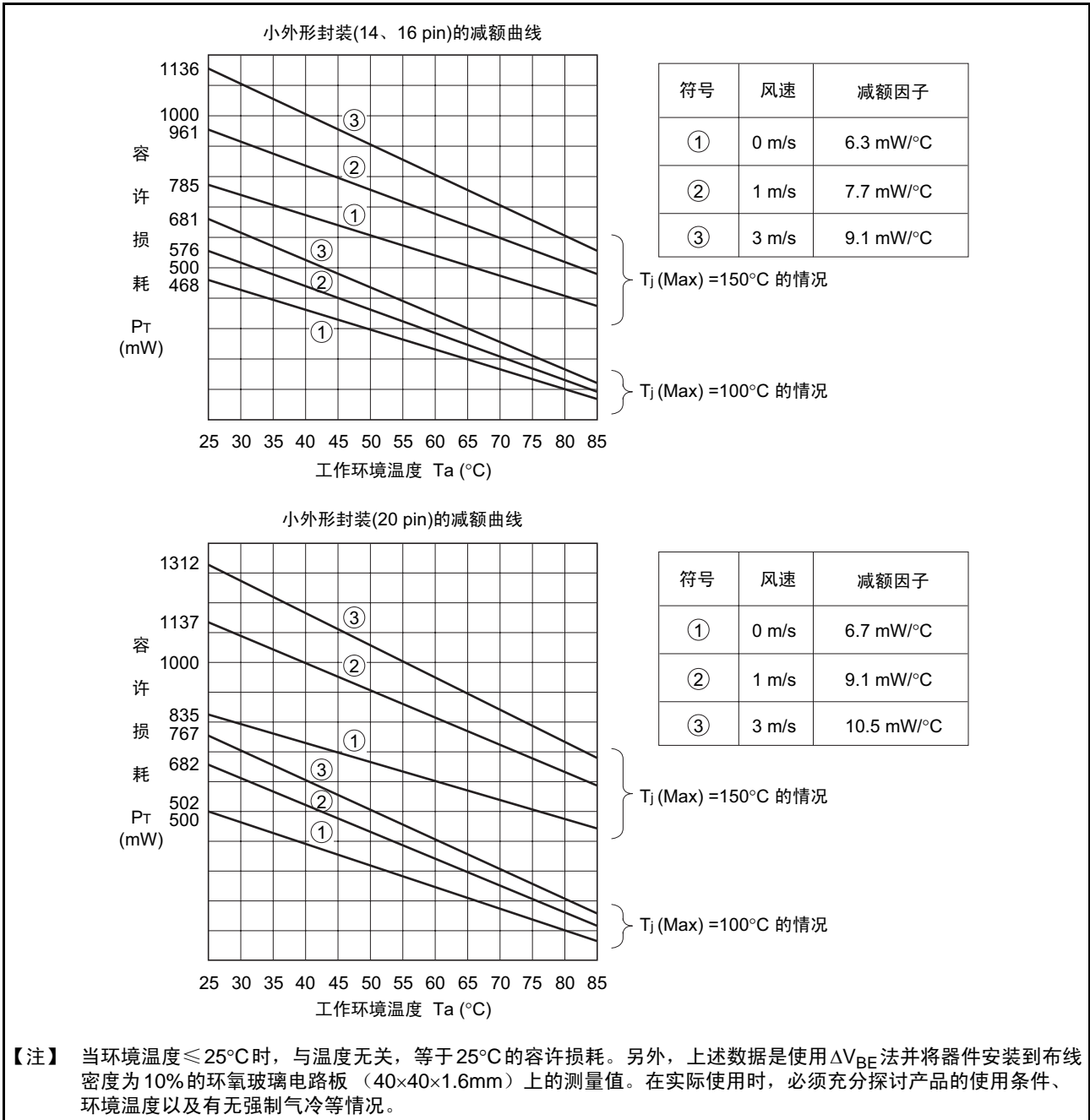


图 1 SOP 的减额曲线

表1 SOP封装的热阻

引脚数	风速	减额因子	热阻	容许损耗 Ta=25°C	
				Tj(max)=150°C	Tj(max)=100°C
14、16	0m/s	6.3mW/°C	160°C/W	785mW	468mW
	1m/s	7.7mW/°C	130°C/W	961mW	576mW
	3m/s	9.1mW/°C	110°C/W	1136mW	681mW
20	0m/s	6.7mW/°C	150°C/W	835mW	502mW
	1m/s	9.1mW/°C	100°C/W	1137mW	682mW
	3m/s	10.5mW/°C	95°C/W	1312mW	787mW

2. 薄型SSOP的热阻

在HD74LV\_A/LVC系列中，TSSOP的减额曲线如图2所示，此时的热阻（ $\Delta j-a$ ）和贴装方法分别如表2和图3所示。

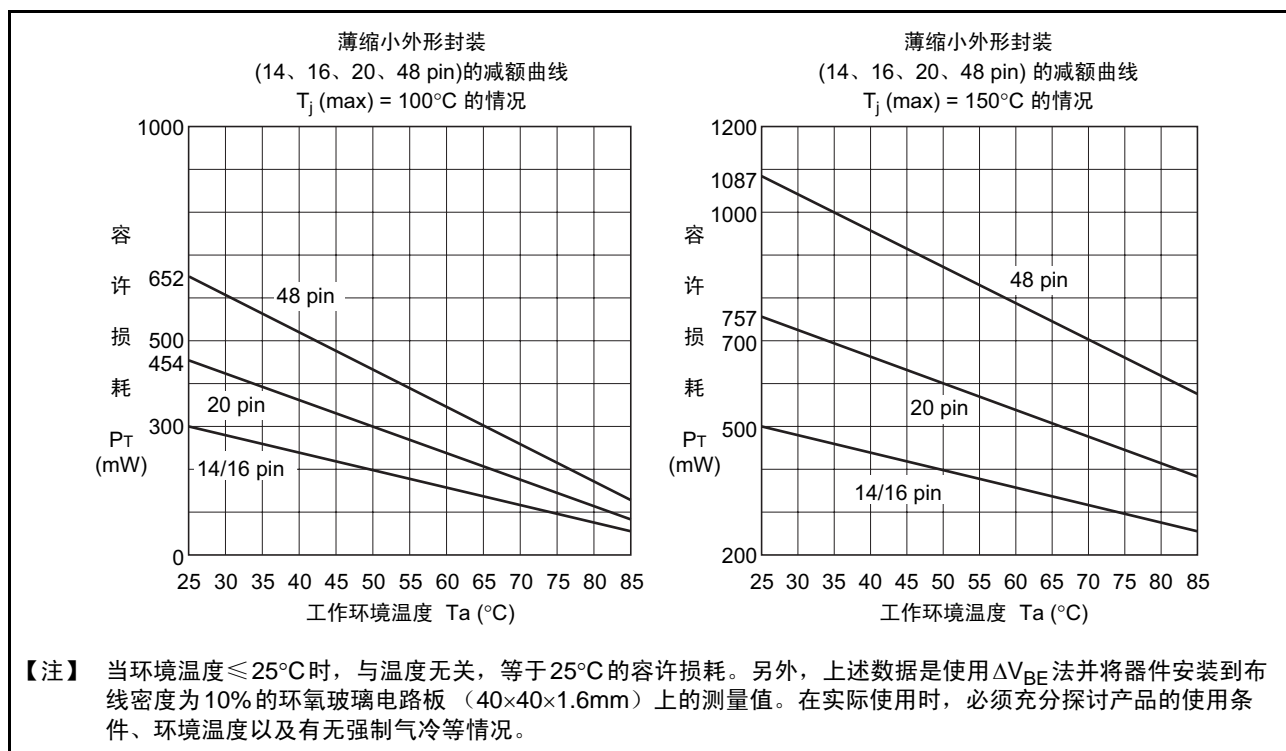


图2 TSSOP的减额曲线

表2 TSSOP封装的热阻

引脚数	风速	减额因子	热阻	容许损耗 Ta=25°C	
				Tj(max)=150°C	Tj(max)=100°C
14、16	0m/s	4.0mW/°C	250°C/W	500mW	300mW
20	0m/s	6.1mW/°C	165°C/W	757mW	454mW
24	0m/s	6.9mW/°C	145°C/W	862mW	517mW
48	0m/s	8.7mW/°C	115°C/W	1087mW	652mW

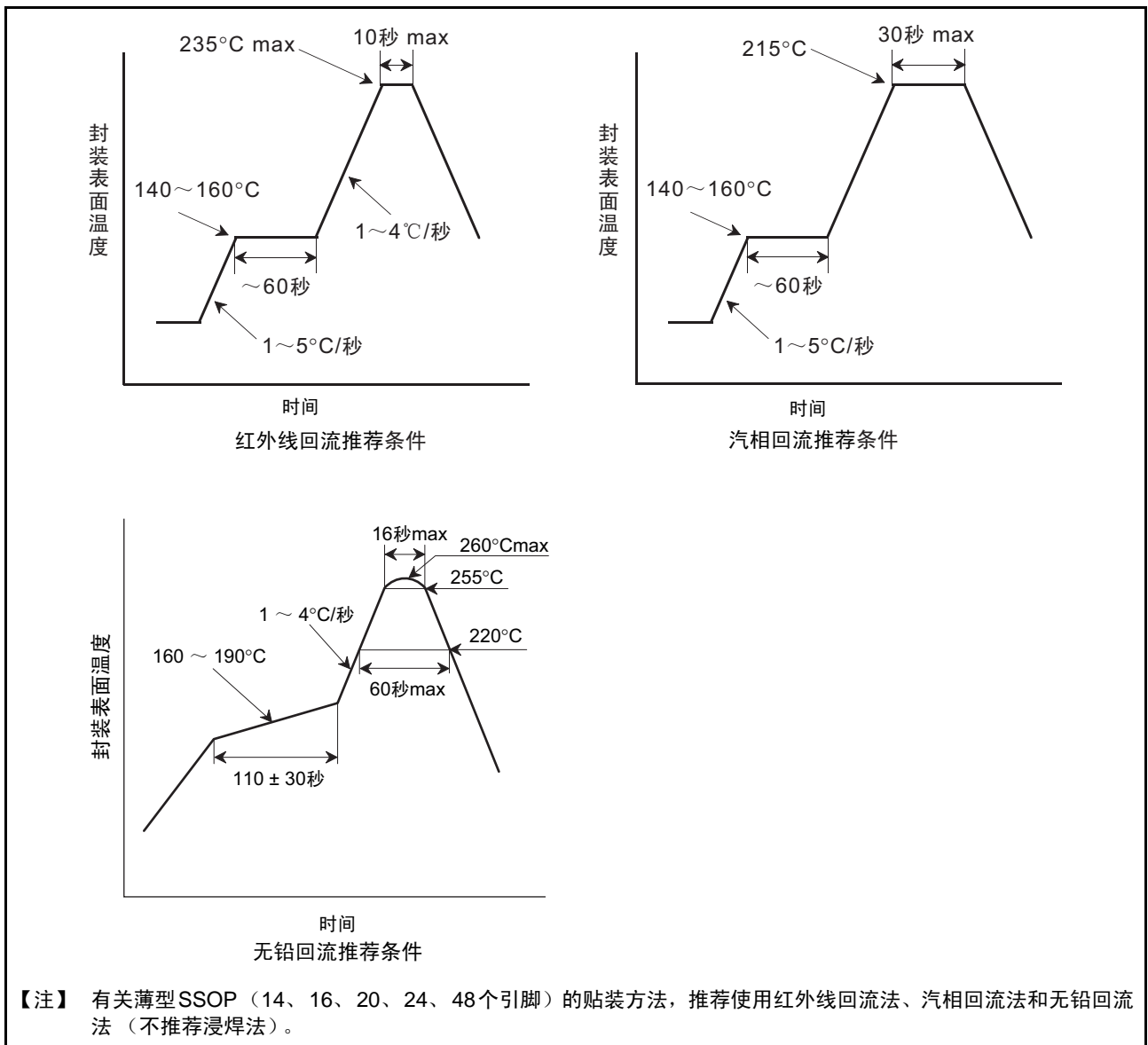
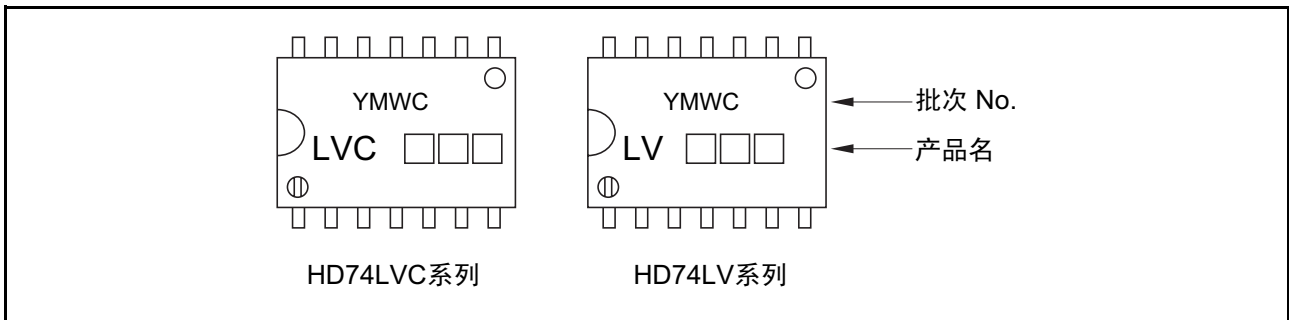


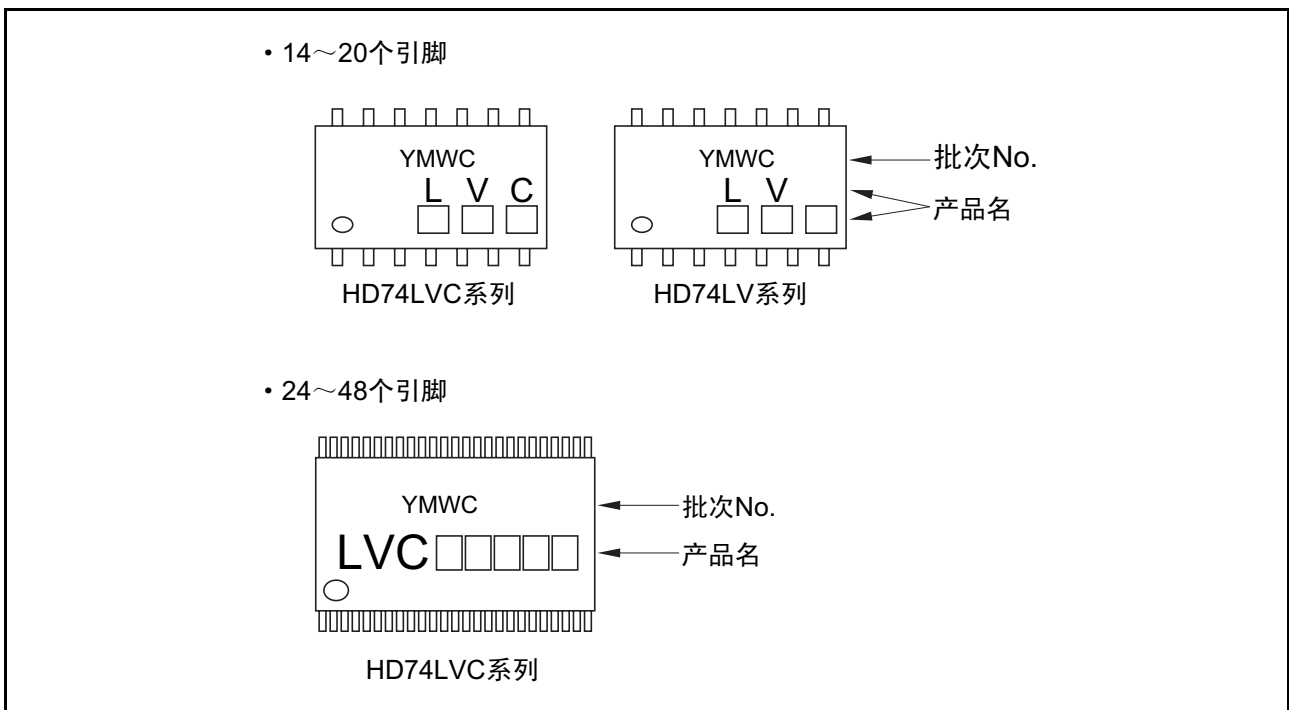
图3 TSSOP的贴装方法

3. 封装上的标记

(1) 小外形封装 (SOP) 14、16、20个引脚



(2) 薄缩小外形封装 (TSSOP) 14、16、20、24、48个引脚



**【注】** 标记规格的含义  
 器件名 (例): HD74LVC245AT  
 Y: 年代码 (公历的最后一位)  
 M: 月代码  
 W: 星期代码  
 C: 本公司的管理代码  
 产品名: 表示除HD74和封装代码 (T) 以外的器件名

修订记录

Rev.	发行日	修订内容	
		页	修订处
1.00	2008.03.25	一	初版发行

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