

### 片式电感

Shielded Power Inductor (Molded Chip - Flat Wire)



#### 特性

Characteristics

磁性铁合金允许高额定电流

Magnetic iron alloy allows high rated currents

高电流能力和处理高瞬态电流峰值

High current capability and handles high transient current spikes

低噪声和低漏磁噪声

Low acoustic noise and low leakage flux noise

#### 应用

Application

大电流电源用DC/DC变换器

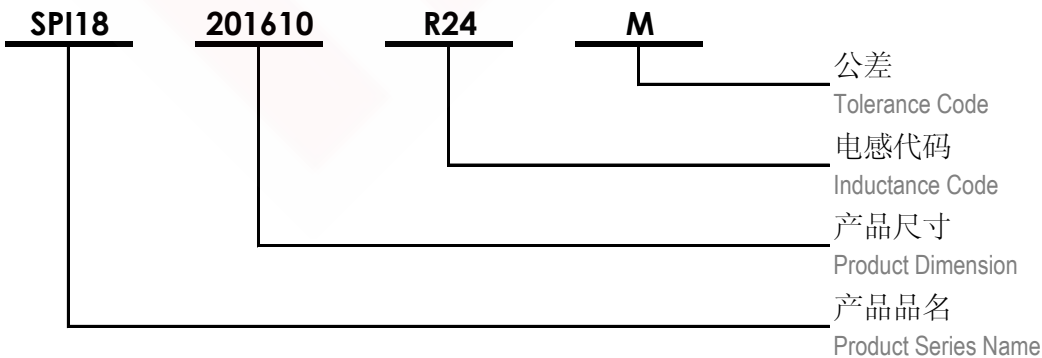
DC/DC-converter for high current power supplies

便携式电源，如PDA、数码相机

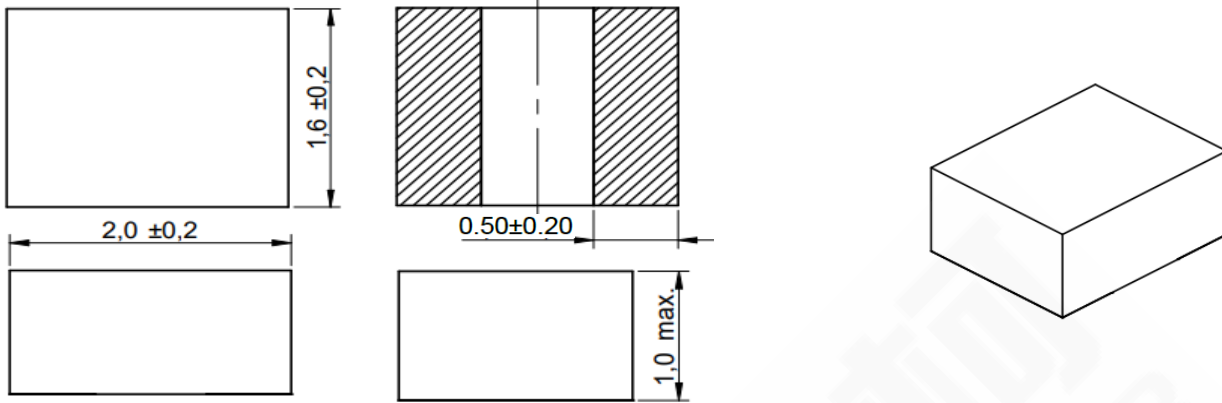
Portable power like PDA, digital camera

#### 产品品名介绍

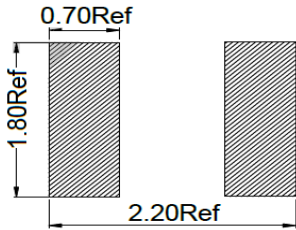
Product Number Structure



### 尺寸 Dimension (mm)



### 焊盘推荐 Land Pattern Recommended (mm)



### 示意图 Schematics



### 电性特性 Electrical Properties

型号 Part No.	电感 Inductance μH	温升电流 Rated Current I <sub>R</sub> 40°C (A)	直流电阻 DC Resistance DCR <sub>max</sub> (mΩ)	饱和电流 Saturation Current I <sub>sat</sub> (A)	耐压 Withstanding Volt. ≤1mA/3S (V) <sub>max</sub>	卷盘数量 Taping Reel Qty. pcs
SPI18-201610-R10M	0.10 ±20%	7.20	13.00	12.00	50.00	2,000
SPI18-201610-R24M	0.24 ±20%	5.40	16.50	7.60		2,000
SPI18-201610-R33M	0.33 ±20%	5.10	20.40	7.40		2,000
SPI18-201610-R47M	0.47 ±20%	4.30	28.10	6.30		2,000
SPI18-201610-R68M	0.68 ±20%	3.80	34.00	5.20		2,000
SPI18-201610-1R0M	1.00 ±20%	3.90	44.60	4.80		2,000
SPI18-201610-2R2M	2.20 ±20%	2.20	131.00	4.10		2,000
SPI18-201610-4R7M	4.70 ±20%	1.50	228.00	1.80		2,000

### 测试状态

Test Condition

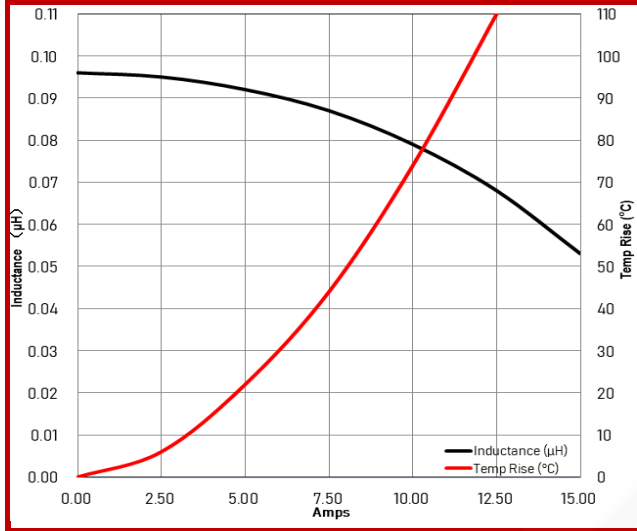
- ☆ 电感测试条件为 1.0MHz/ 1.0V  
Inductance measure condition at 1.0 MHz/ 1.0V
- ☆ 工作温度: -40°C ~ +125°C  
Operating Temperature: -40°C ~ +125°C
- ☆ 饱和电流: 电感值下降其初始值的30%时所加载的实际直流电流值  
Saturation Current: The actual value of DC current when the inductance drop 30% of initial value



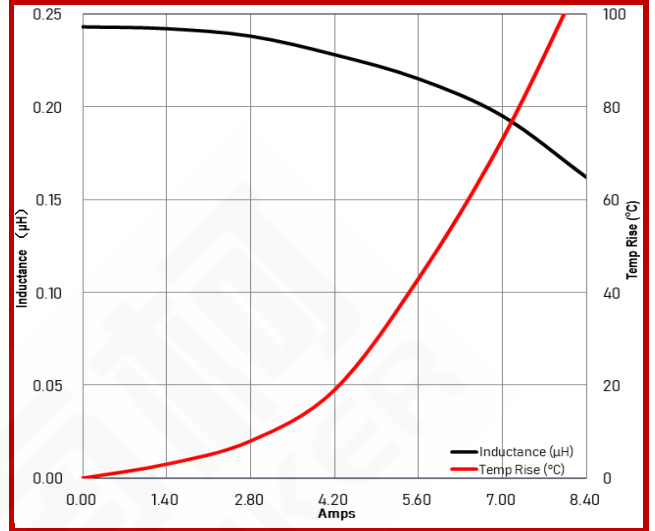
### 饱和电流VS温升电流曲线

Saturation current vs temperature rise current curve

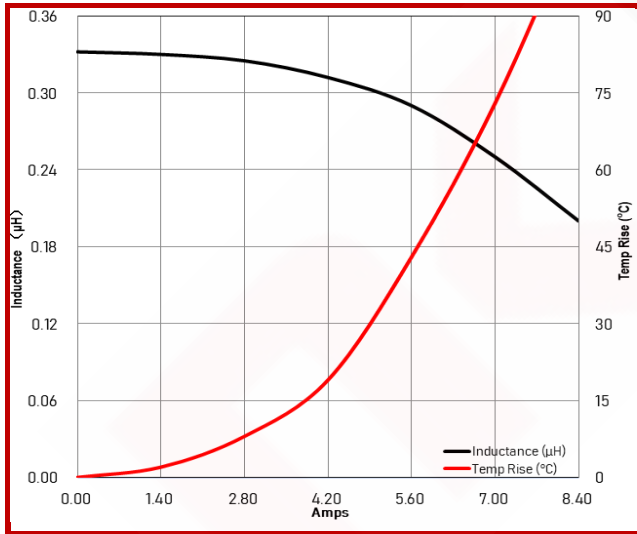
**SPI18-201610-R10M**



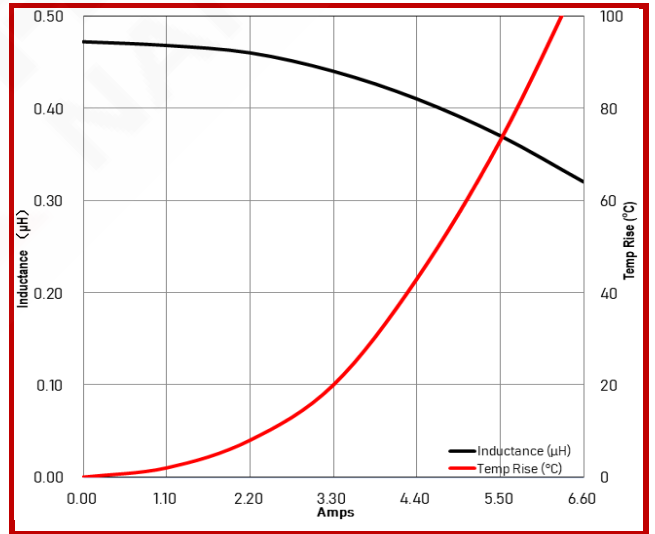
**SPI18-201610-R24M**



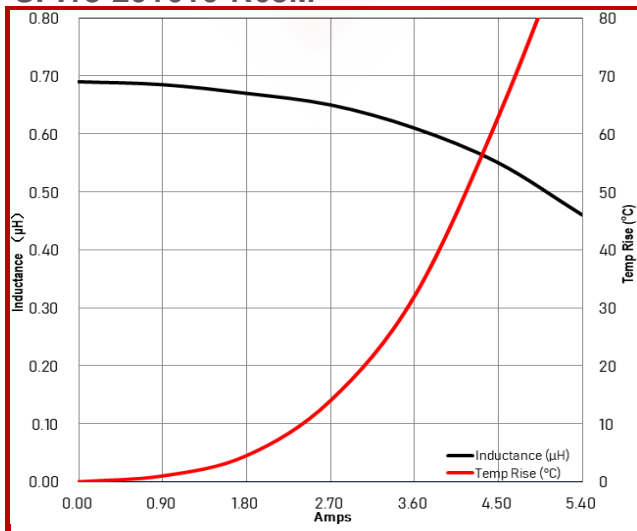
**SPI18-201610-R33M**



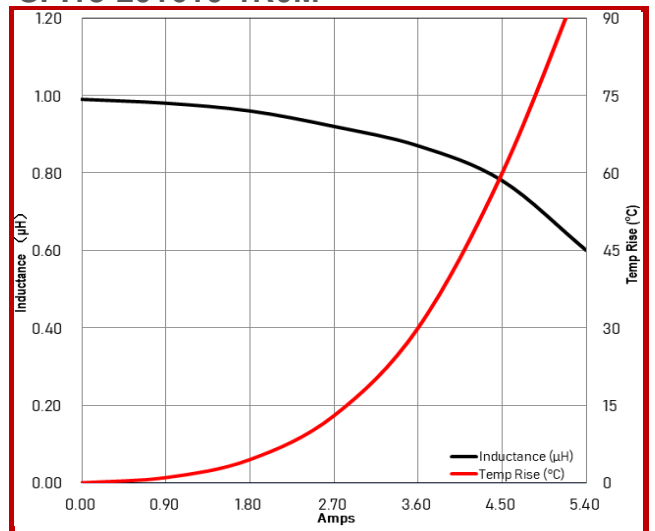
**SPI18-201610-R47M**



**SPI18-201610-R68M**



**SPI18-201610-1R0M**

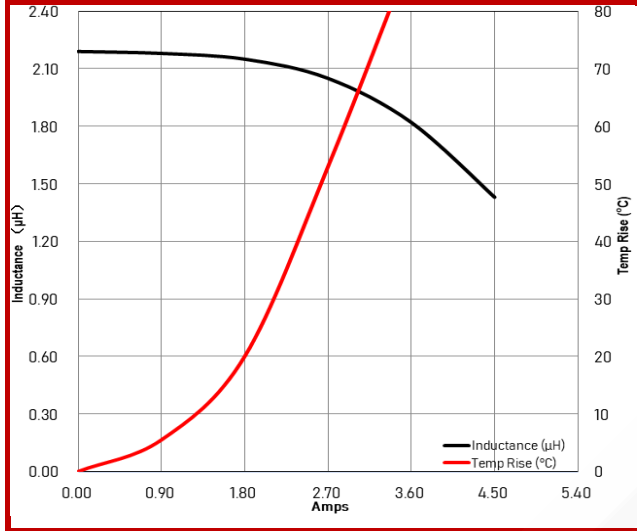




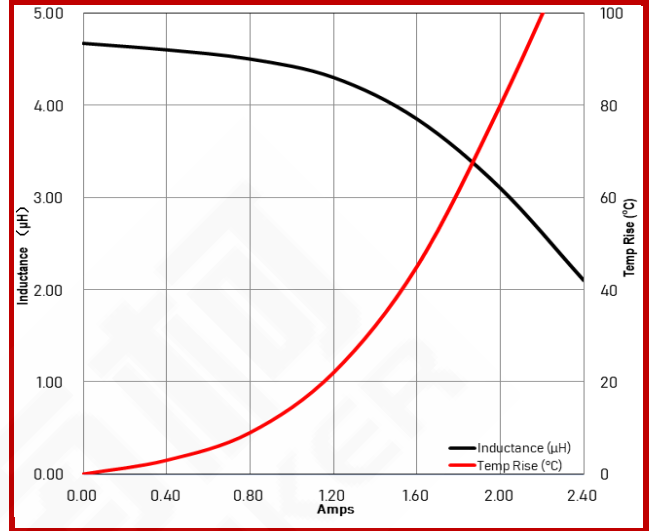
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Saturation current vs temperature rise current curve

#### SPI18-201610-2R2M



#### SPI18-201610-4R7M





### 尺寸

Dimension (mm)

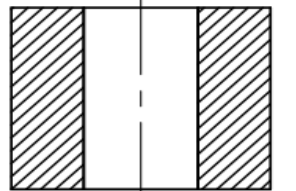
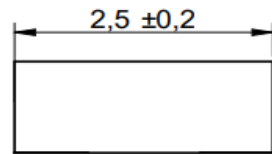
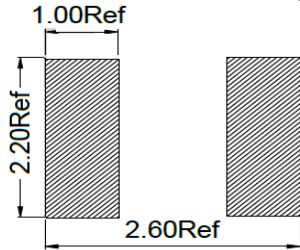


示意图  
Schematics



### 焊盘推荐

Land Pattern Recommended (mm)



### 电性特性

Electrical Properties

型号 Part No.	电感 Inductance μH	温升电流 Rated Current I <sub>R</sub> 40°C (A)	直流电阻 DC Resistance DCR <sub>max</sub> (mΩ)	饱和电流 Saturation Current I <sub>sat</sub> (A)	耐压 Withstanding Volt. ≤1mA/3S (V) <sub>max</sub>	卷盘数量 Taping Reel Qty. pcs
SPI18-252010-R47M	0.47 ±20%	4.90	19.50	6.40	50.00	2,000
SPI18-252010-1R0M	1.00 ±20%	3.60	29.00	5.20		2,000
SPI18-252010-1R5M	1.50 ±20%	3.50	41.00	3.90		2,000
SPI18-252010-2R2M	2.20 ±20%	2.50	63.00	3.40		2,000
SPI18-252010-4R7M	4.70 ±20%	1.60	131.00	2.10		2,000

### 测试状态

Test Condition

☆ 电感测试条件为 1.0MHz/ 1.0V

Inductance measure condition at 1.0 MHz/ 1.0V

☆ 工作温度: -40°C ~ +125°C

Operating Temperature: -40°C ~ +125°C

☆ 饱和电流: 电感值下降其初始值的30%时所加载的实际直流电流值

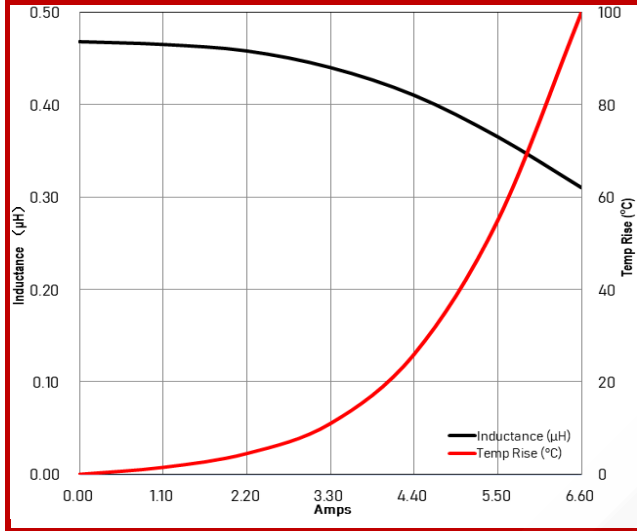
Saturation Current: The actual value of DC current when the inductance drop 30% of initial value



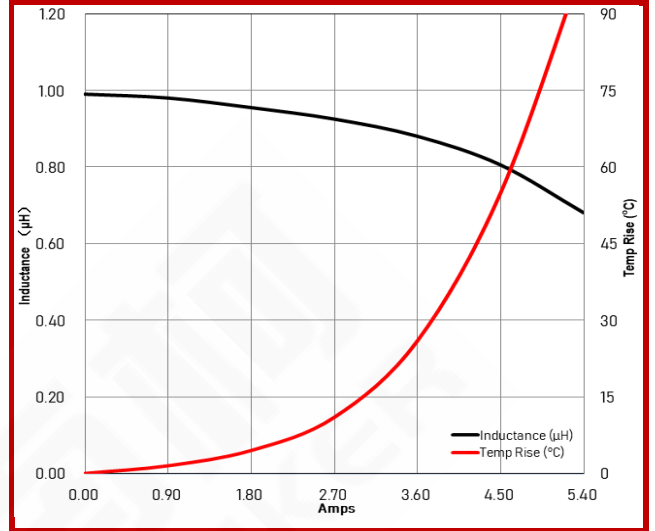
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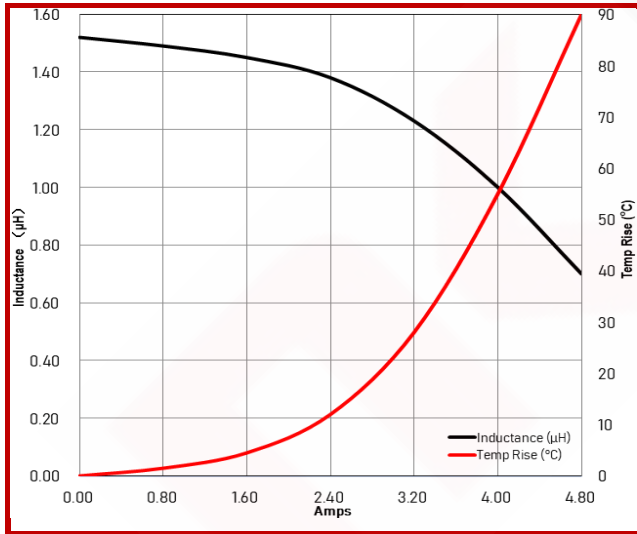
**SPI18-252010-R47M**



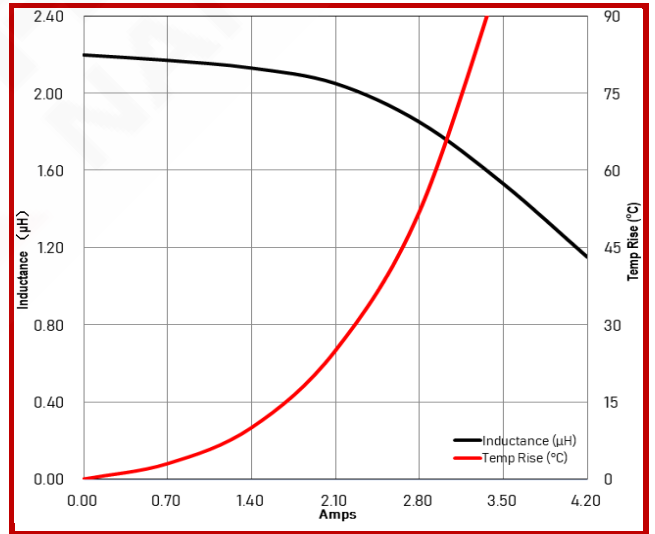
**SPI18-252010-1R0M**



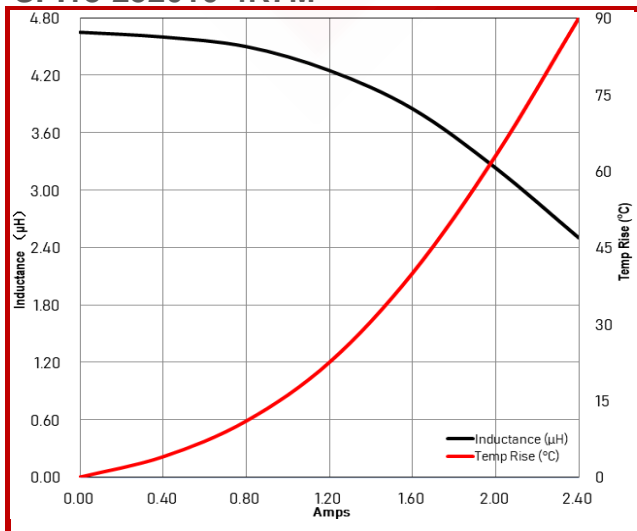
**SPI18-252010-1R5M**



**SPI18-252010-2R2M**



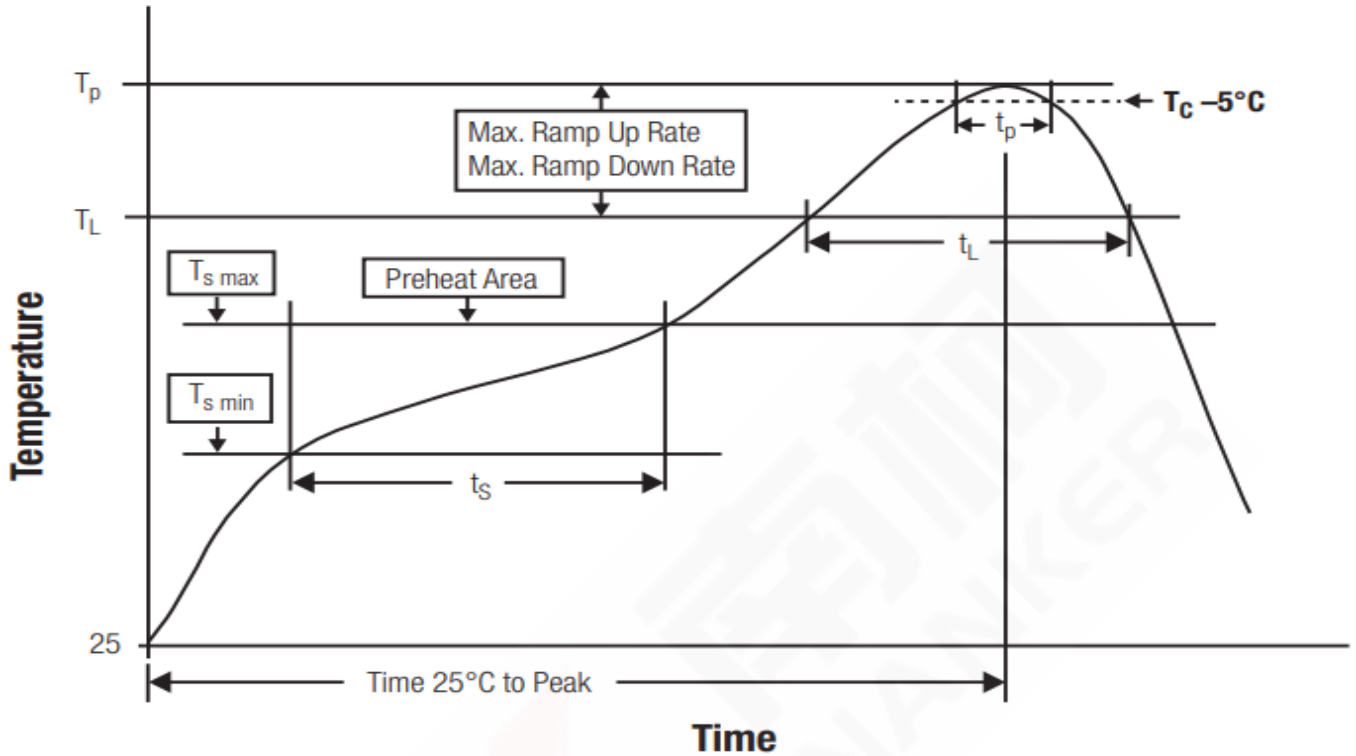
**SPI18-252010-4R7M**





### 回流焊曲线图

Classification Reflow Profile for SMT Components



### 封装体峰值温度(Tp)分类

Classification Reflow Soldering Profile:

	封装厚度 Package Thickness	封装体积 Package Volume		
		<350 mm <sup>3</sup>	350~2,000 mm <sup>3</sup>	>2,000 mm <sup>3</sup>
无铅装配 PB-Free Assembly	<1.60mm	260°C	260°C	260°C
	1.60~2.50mm	260°C	250°C	245°C
	>2.50mm	260°C	245°C	245°C

- ◆ 回流焊参照标准 IPC/JEDEC J-STD-020D。  
Reflow is refer to standard IPC/JEDEC J-STD-020D.