

开磁路功率电感

Unshielded Power Inductor (SMD)



特性

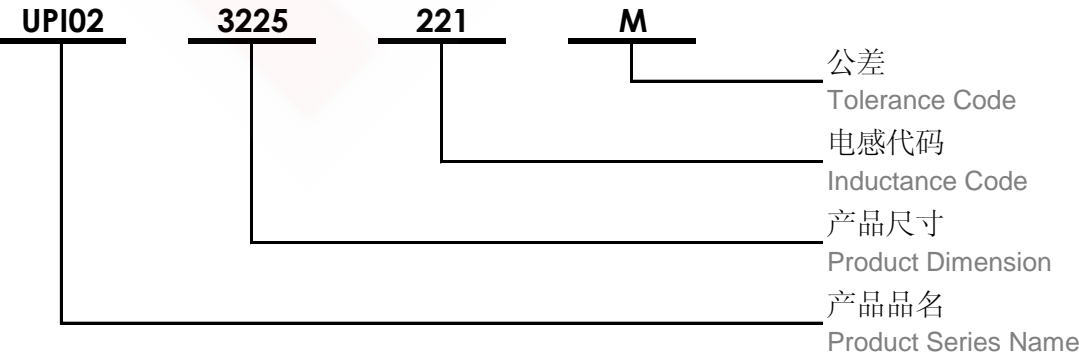
- Characteristics
- 紧凑电路的小电感
- Small inductances for compact circuits
- 低直流电阻
- Low DC-resistance
- 绕在特殊铁氧体磁芯上的微型片式电感
- Miniature chip inductor wound on a special ferrite core

应用

- Application
- 低功率DC/DC转换器
- Low power DC/DC converter
- EMI 滤波
- EMI Filtering
- 射频电路
- RF Circuit

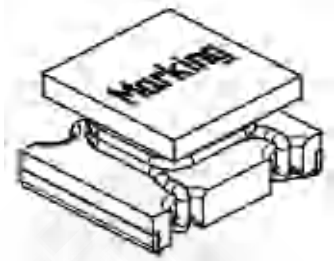
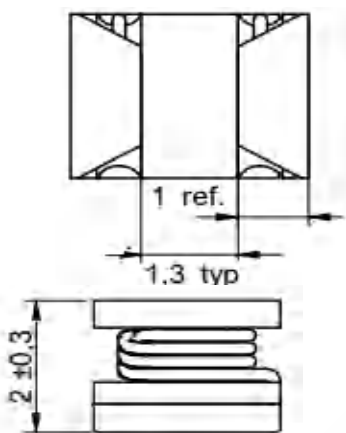
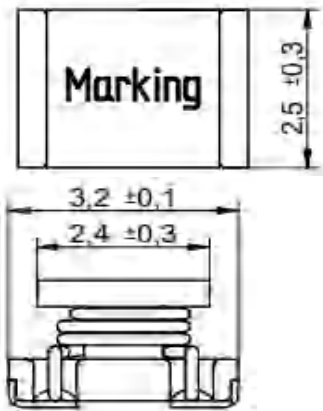
产品品名介绍

Product Number Structure





尺寸  
Dimension (mm)



焊盘推荐  
Land Pattern Recommended (mm)

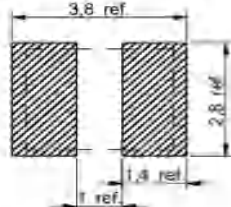


示意图  
Schematics



电性特性  
Electrical Properties

型号 Part No.	电感 Inductance μH	温升电流 Rated Current I <sub>R</sub> max 40°C (A)	直流电阻 DCResistance DCR <sub>max</sub> (Ω)	饱和电流 Saturation Current I <sub>sat</sub> typ (A)	卷盘数量 Taping Reel Qty. pcs
UPI02-3225-1R0M	1.00 ±20%	0.75	0.10	3.20	2,000
UPI02-3225-1R5M	1.50 ±20%	0.66	0.13	2.10	2,000
UPI02-3225-1R8M	1.80 ±20%	0.64	0.14	2.00	2,000
UPI02-3225-2R2M	2.20 ±20%	0.62	0.15	1.80	2,000
UPI02-3225-2R7M	2.70 ±20%	0.60	0.18	1.60	2,000
UPI02-3225-3R3M	3.30 ±20%	0.58	0.20	1.50	2,000
UPI02-3225-3R9M	3.90 ±20%	0.54	0.25	1.35	2,000
UPI02-3225-4R7M	4.70 ±20%	0.49	0.28	1.25	2,000
UPI02-3225-5R6M	5.60 ±20%	0.44	0.36	1.15	2,000
UPI02-3225-6R8M	6.80 ±20%	0.42	0.40	1.10	2,000
UPI02-3225-8R2M	8.20 ±20%	0.39	0.45	0.95	2,000
UPI02-3225-100M	10.00 ±20%	0.32	0.65	0.85	2,000

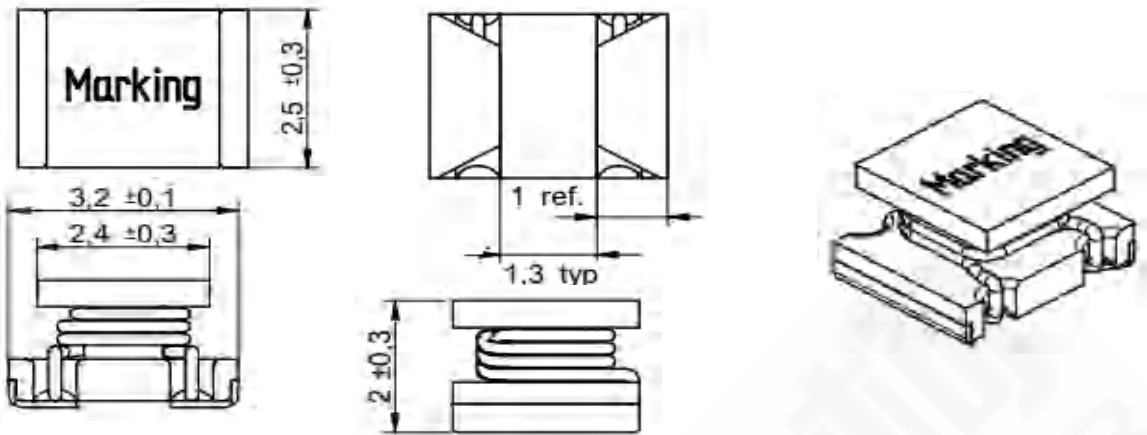
测试状态

Test Condition

- ☆ 电感测试条件为 1.0 MHz/ 100mV  
Inductance measure condition at 1.0 MHz/ 100mV
- ☆ 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10%时所加载的实际直流电流值  
Saturation Current: The actual value of DC current when the inductance drop 10% of initial value



尺寸  
Dimension (mm)



焊盘推荐  
Land Pattern Recommended (mm)

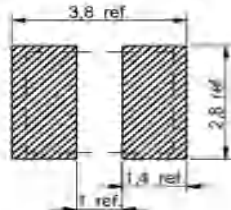


示意图  
Schematics



电性特性  
Electrical Properties

型号 Part No.	电感 Inductance μH	温升电流 Rated Current I <sub>R</sub> max 40°C (A)	直流电阻 DC Resistance DCR <sub>max</sub> (Ω)	饱和电流 Saturation Current I <sub>sat</sub> typ (A)	卷盘数量 Taping Reel Qty. pcs
UPI02-3225-120M	12.00 ±20%	0.290	0.70	0.78	2,000
UPI02-3225-150M	15.00 ±20%	0.270	1.00	0.70	2,000
UPI02-3225-180M	18.00 ±20%	0.240	1.10	0.65	2,000
UPI02-3225-220M	22.00 ±20%	0.220	1.30	0.60	2,000
UPI02-3225-470M	47.00 ±20%	0.146	3.00	0.40	2,000
UPI02-3225-680M	68.00 ±20%	0.130	3.80	0.30	2,000
UPI02-3225-101M	100.00 ±20%	0.100	6.50	0.25	2,000
UPI02-3225-121M	120.00 ±20%	0.095	7.00	0.18	2,000
UPI02-3225-221M	220.00 ±20%	0.075	11.80	0.24	2,000
UPI02-3225-331M	330.00 ±20%	0.065	16.50	0.18	2,000
UPI02-3225-471M	470.00 ±20%	0.055	25.00	0.12	2,000

测试状态

Test Condition

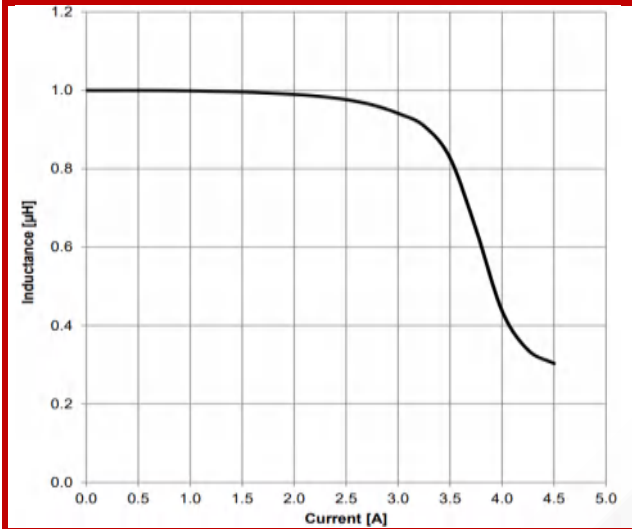
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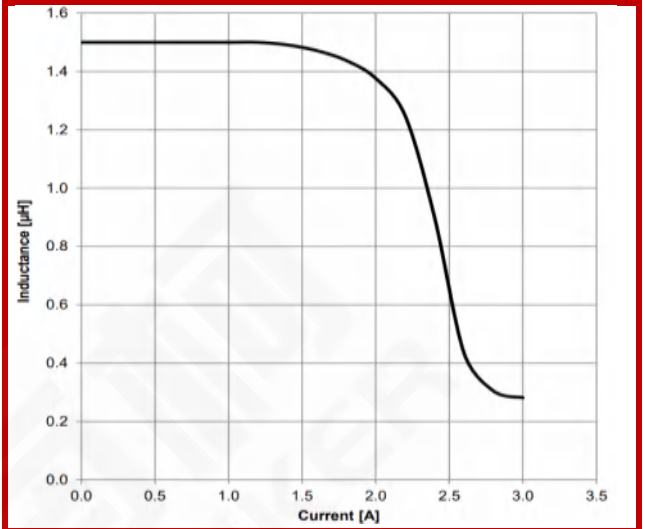
### 典型电感与电流特性

Typical Inductance vs. Current Characteristics

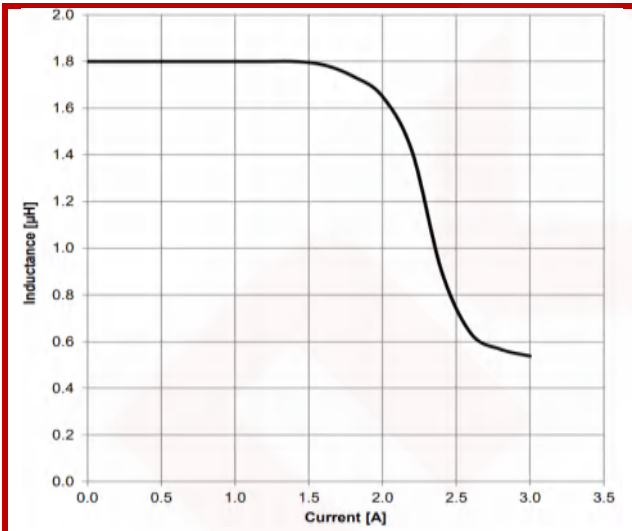
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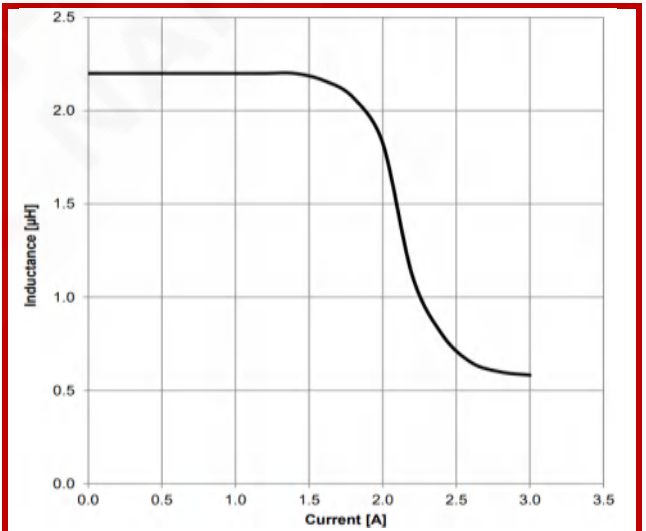
**UPI02-3225-1R5M**



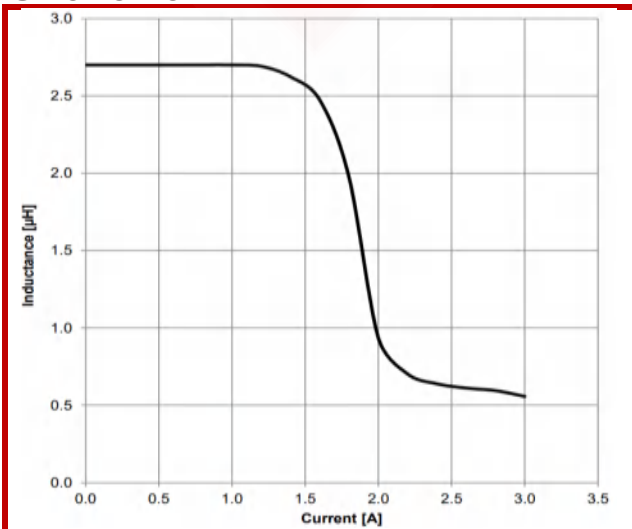
**UPI02-3225-1R8M**



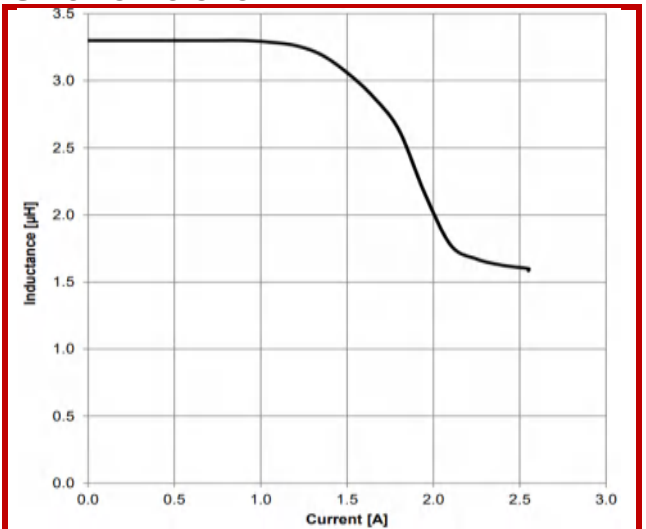
**UPI02-3225-2R2M**



**UPI02-3225-2R7M**



**UPI02-3225-3R3M**

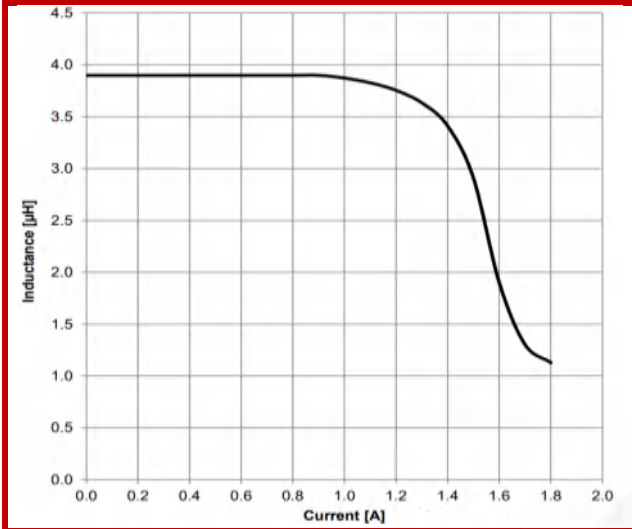




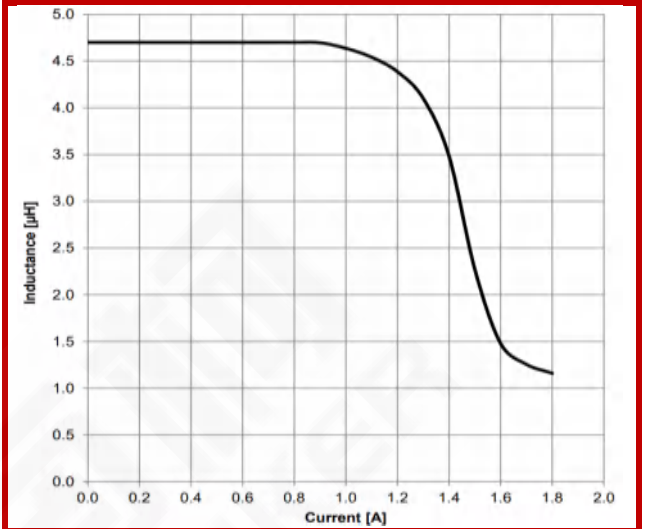
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Typical Inductance vs. Current Characteristics

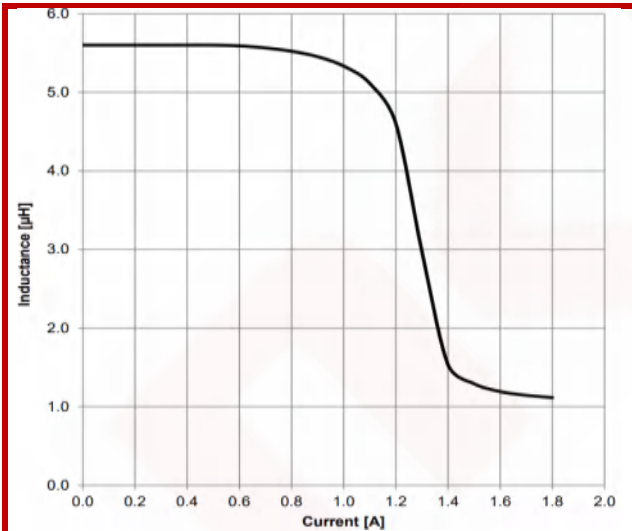
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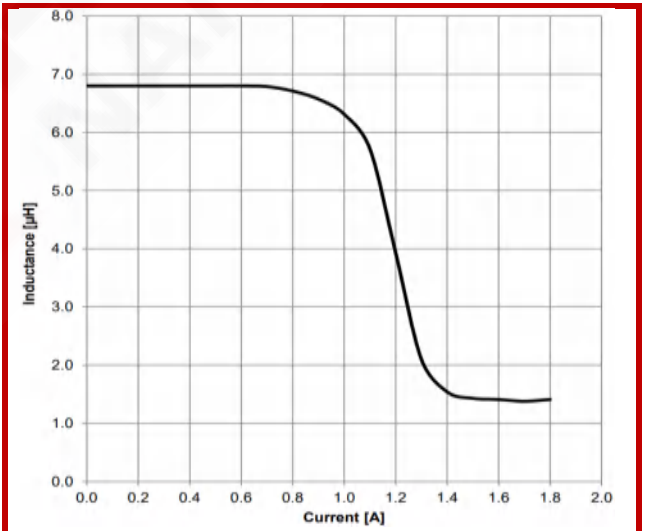
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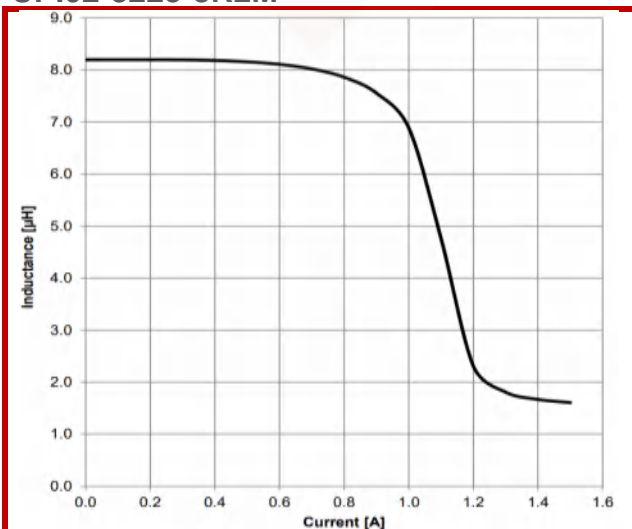
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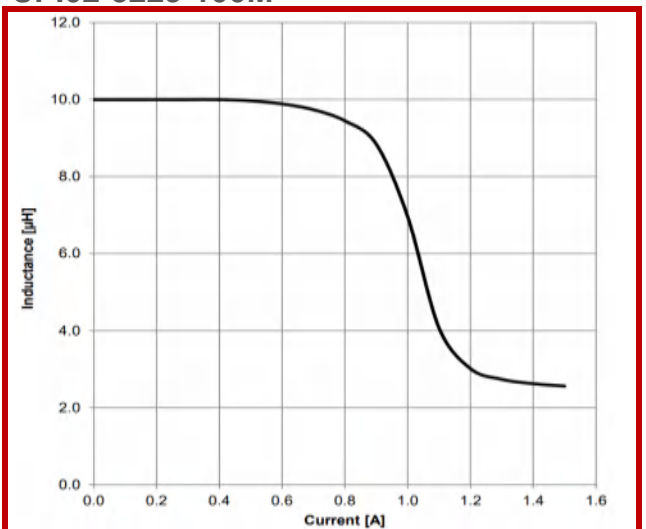
**UPI02-3225-6R8M**



**UPI02-3225-8R2M**



**UPI02-3225-100M**



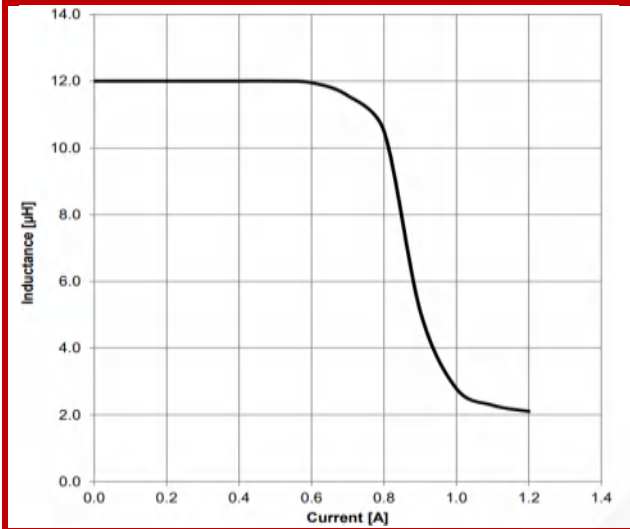




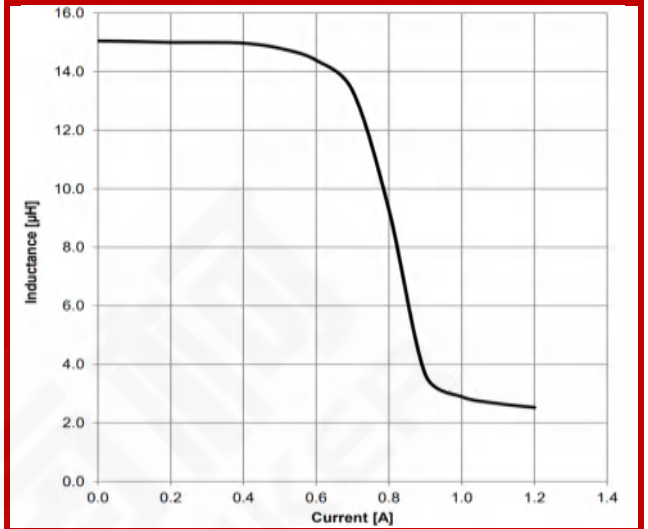
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Typical Inductance vs. Current Characteristics

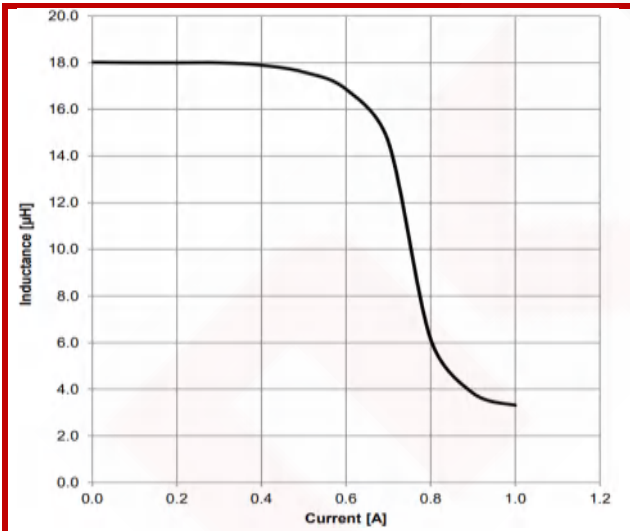
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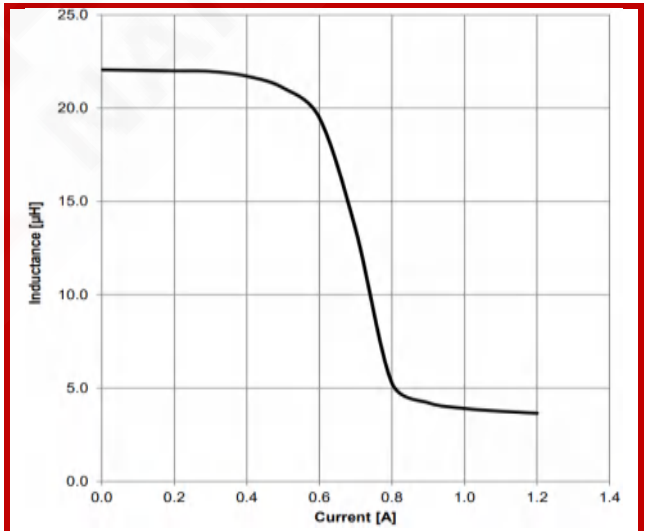
**UPI02-3225-150M**



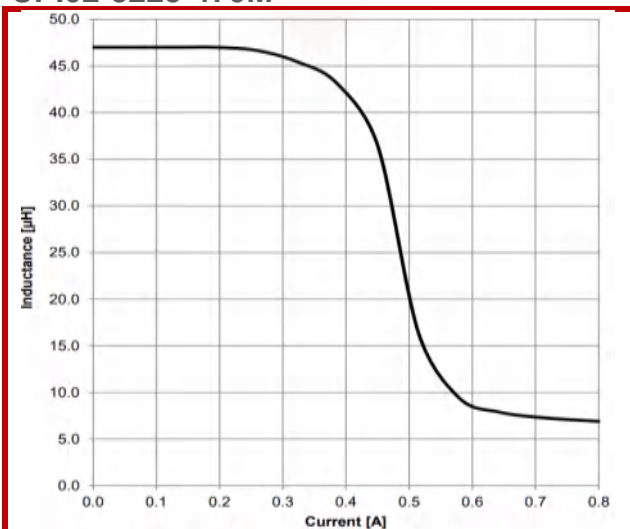
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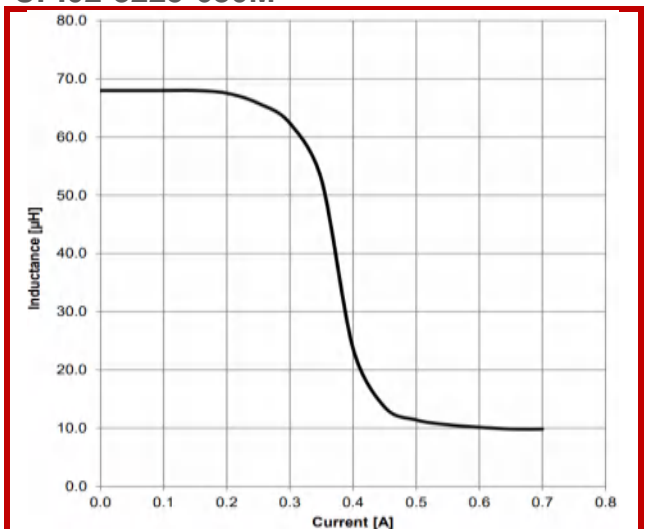
**UPI02-3225-220M**



**UPI02-3225-470M**



**UPI02-3225-680M**

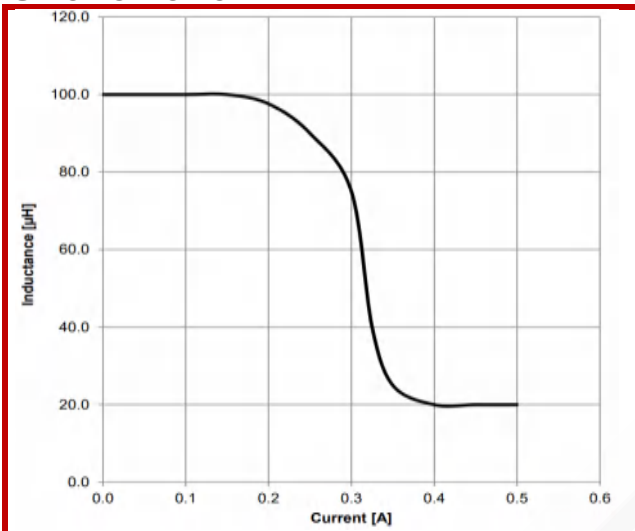




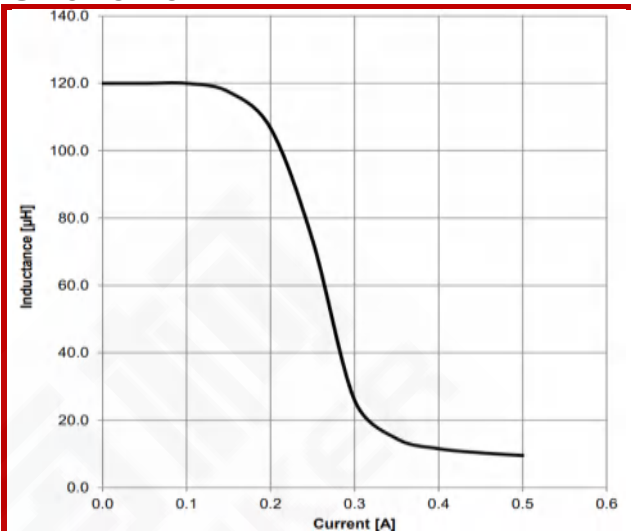
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Typical Inductance vs. Current Characteristics

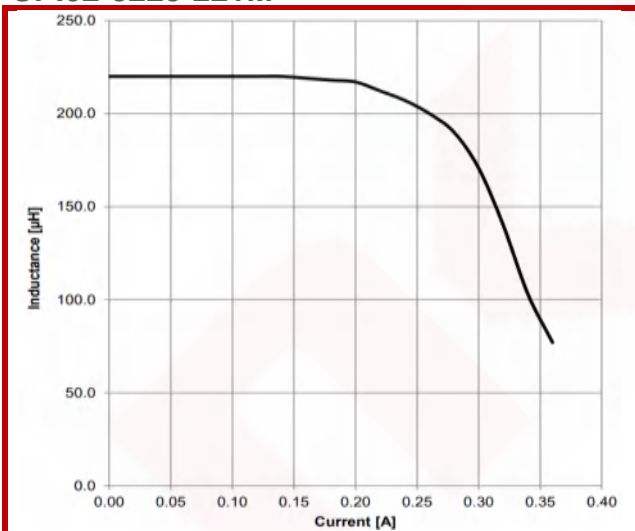
**UPI02-3225-101M**



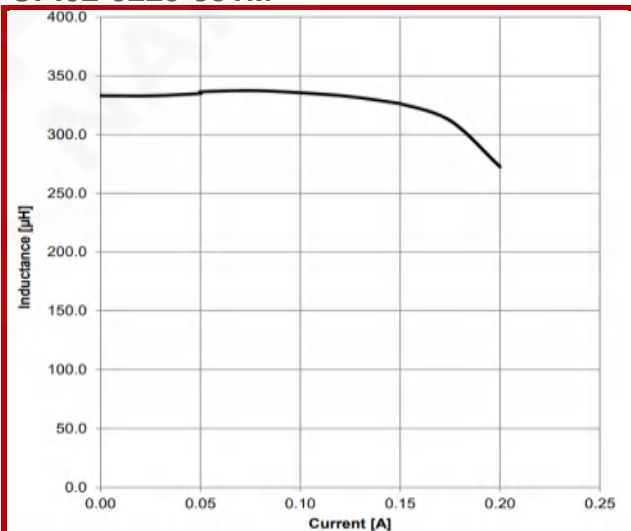
**UPI02-3225-121M**



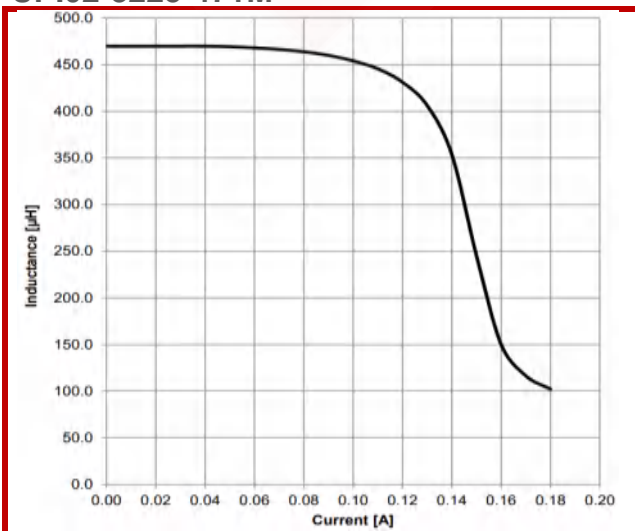
**UPI02-3225-221M**



**UPI02-3225-331M**



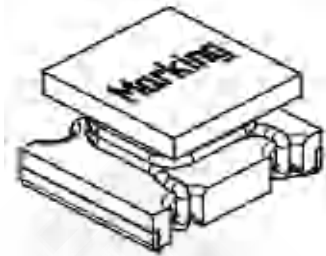
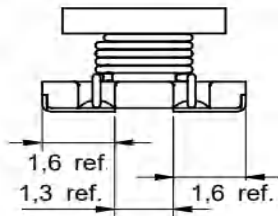
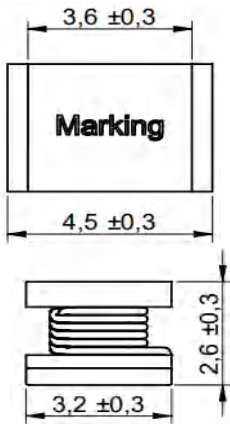
**UPI02-3225-471M**





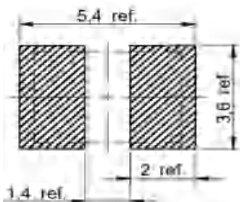
尺寸

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> max 40°C (A)	直流电阻 DC Resistance DCR <sub>max</sub> (Ω)	饱和电流 Saturation Current I <sub>sat</sub> typ (A)	卷盘数量 Taping Reel Qty. pcs
UPI02-4532-1R0M	1.00 ±20%	1.80	0.08	4.40	500
UPI02-4532-1R5M	1.50 ±20%	1.75	9.00	4.00	500
UPI02-4532-1R8M	1.80 ±20%	1.70	0.10	0.50	500
UPI02-4532-2R2M	2.20 ±20%	1.60	0.11	2.75	500
UPI02-4532-2R7M	2.70 ±20%	1.50	0.12	2.70	500
UPI02-4532-3R3M	3.30 ±20%	1.40	0.13	2.70	500
UPI02-4532-3R9M	3.90 ±20%	1.32	0.14	2.50	500
UPI02-4532-4R7M	4.70 ±20%	1.24	0.15	2.00	500
UPI02-4532-5R6M	5.60 ±20%	1.18	0.18	1.90	500
UPI02-4532-6R8M	6.80 ±20%	1.10	0.20	1.60	500

测试状态

Test Condition

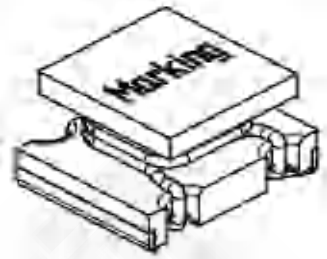
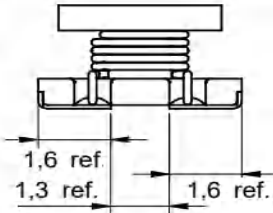
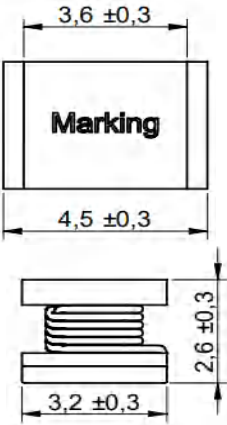
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Inductance measure condition at 1.0 MHz/ 100mV
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Operating Temperature: -40°C ~ +125°C
- ☆ 饱和电流: 电感值下降其初始值的10%时所加载的实际直流电流值  
Saturation Current: The actual value of DC current when the inductance drop 10% of initial value





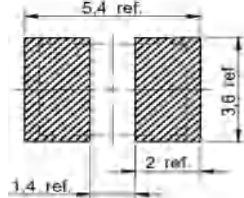
尺寸

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> max 40°C (A)	直流电阻 DC Resistance DCR <sub>max</sub> (Ω)	饱和电流 Saturation Current I <sub>sat</sub> typ (A)	卷盘数量 Taping Reel Qty. pcs
UPI02-4532-8R2M	8.20 ±20%	1.00	0.25	1.60	500
UPI02-4532-100M	10.00 ±20%	0.95	0.30	1.00	500
UPI02-4532-120M	12.00 ±20%	0.80	0.42	1.40	500
UPI02-4532-150M	15.00 ±20%	0.73	0.50	1.24	500
UPI02-4532-180M	18.00 ±20%	0.68	0.60	1.10	500
UPI02-4532-220M	22.00 ±20%	0.63	0.70	1.00	500
UPI02-4532-330M	33.00 ±20%	0.43	1.10	0.85	500
UPI02-4532-470M	47.00 ±20%	0.39	1.50	0.79	500
UPI02-4532-680M	68.00 ±20%	0.33	2.10	0.61	500
UPI02-4532-820M	82.00 ±20%	0.30	2.30	0.57	500

测试状态

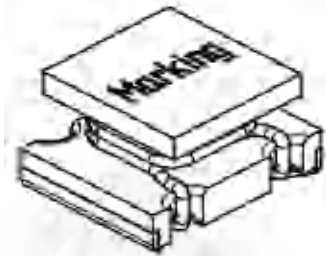
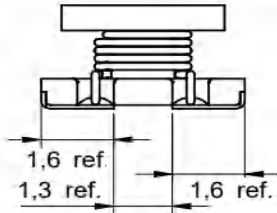
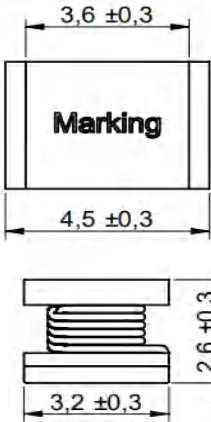
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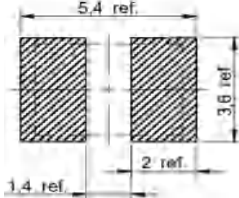
尺寸

Dimension (mm)



焊盘推荐

Land Pattern Recommended (mm)



示意图

Schematics



电性特性

Electrical Properties

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UPI02-4532-101M	100 ±20%	0.270	2.50	0.450	500
UPI02-4532-151M	150 ±20%	0.220	3.70	0.420	500
UPI02-4532-391M	390 ±20%	0.110	13.00	0.270	500
UPI02-4532-471M	470 ±20%	0.105	14.20	0.180	500
UPI02-4532-681M	680 ±20%	0.090	16.80	0.200	500
UPI02-4532-821M	820 ±20%	0.085	20.00	0.150	500
UPI02-4532-102M	1,000 ±20%	0.070	30.00	0.160	500
UPI02-4532-152M	1,500 ±20%	0.055	38.50	0.095	500
UPI02-4532-221M	2,200 ±20%	0.040	47.00	0.078	500

测试状态

Test Condition

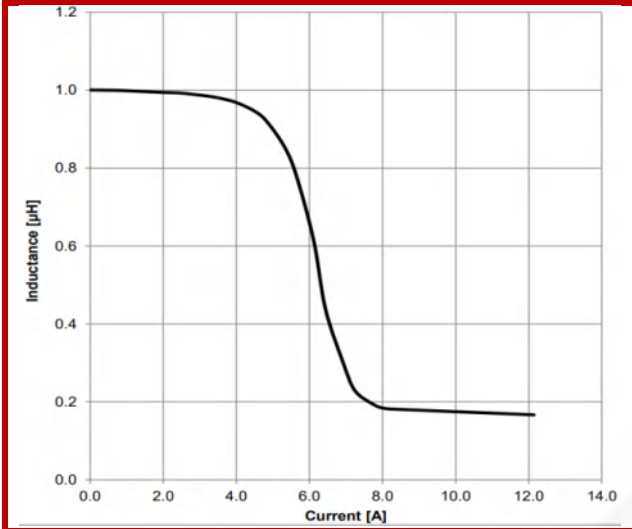
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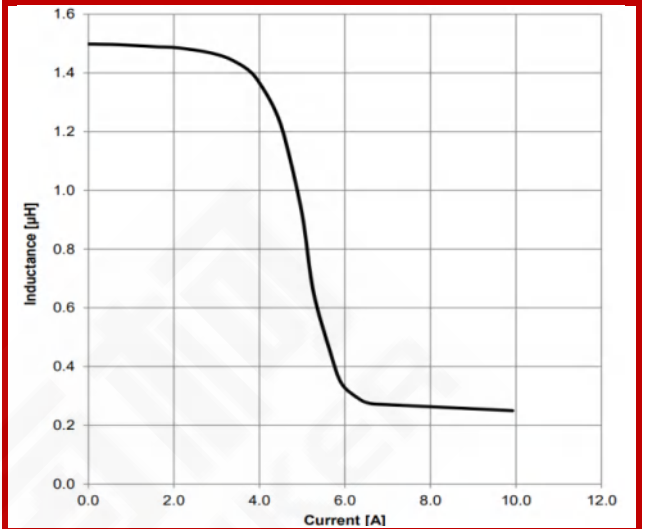
### 典型电感与电流特性

Typical Inductance vs. Current Characteristics

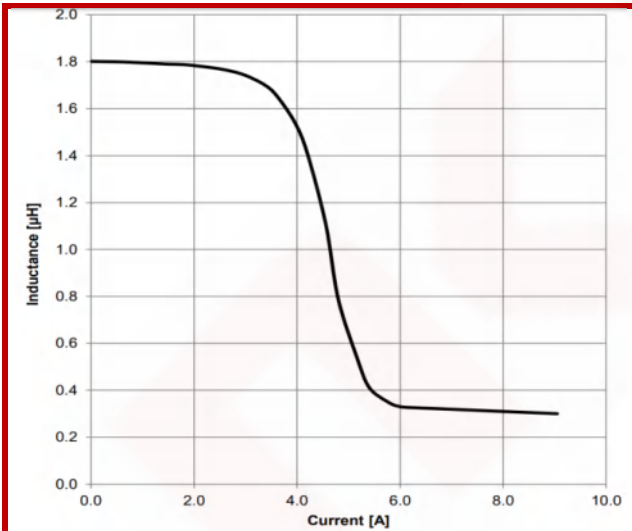
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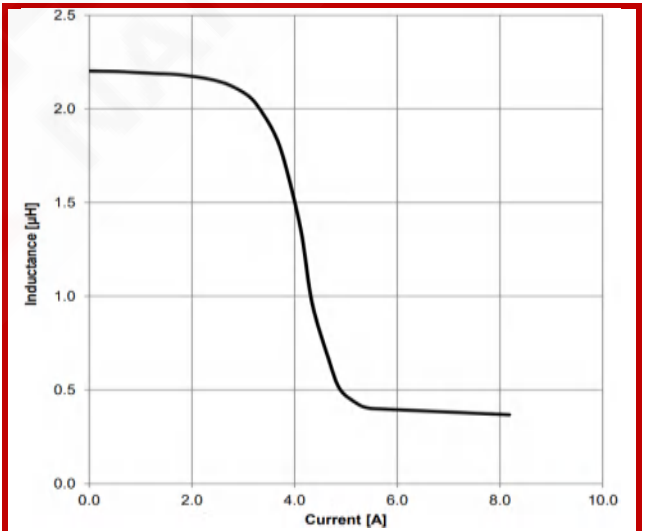
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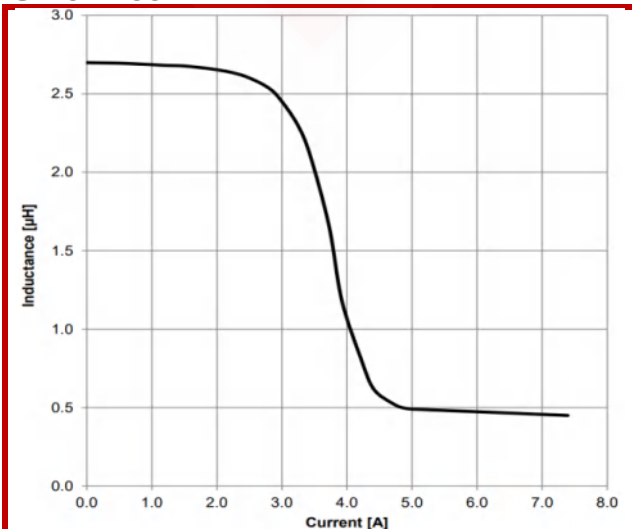
UPI02-4532-1R8M



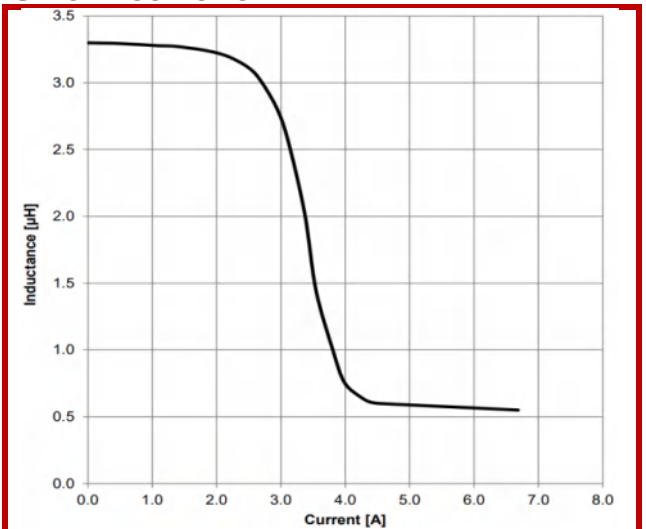
UPI02-4532-2R2M



UPI02-4532-2R7M



UPI02-4532-3R3M

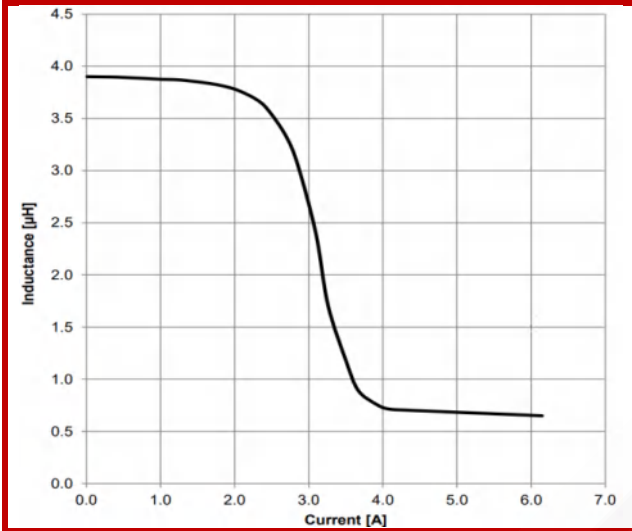




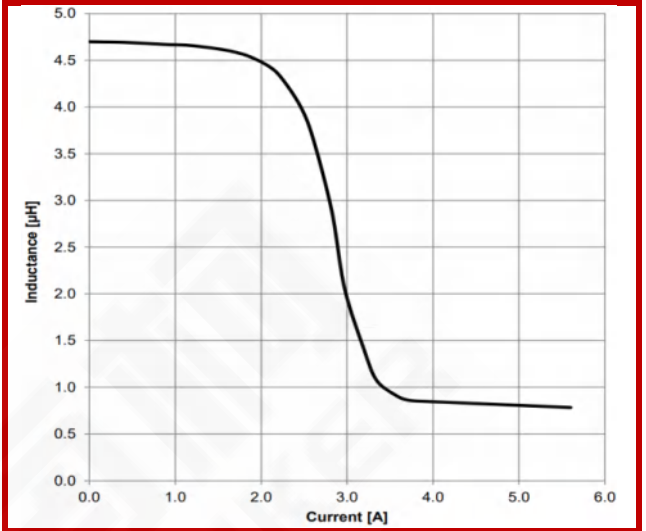
### 典型电感与电流特性

Typical Inductance vs. Current Characteristics

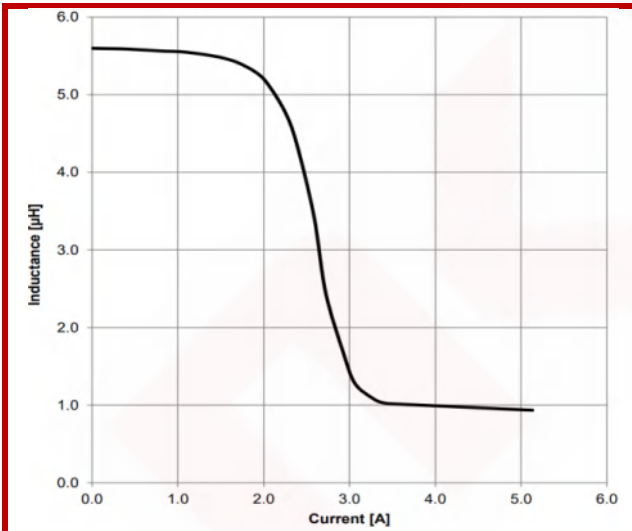
**UPI02-4532-3R9M**



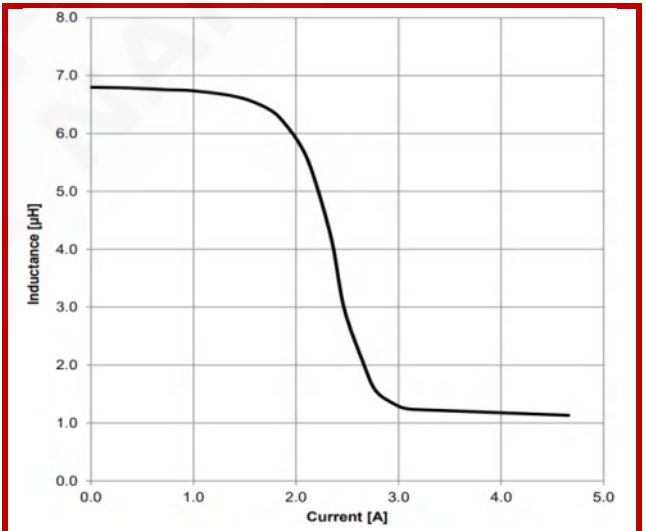
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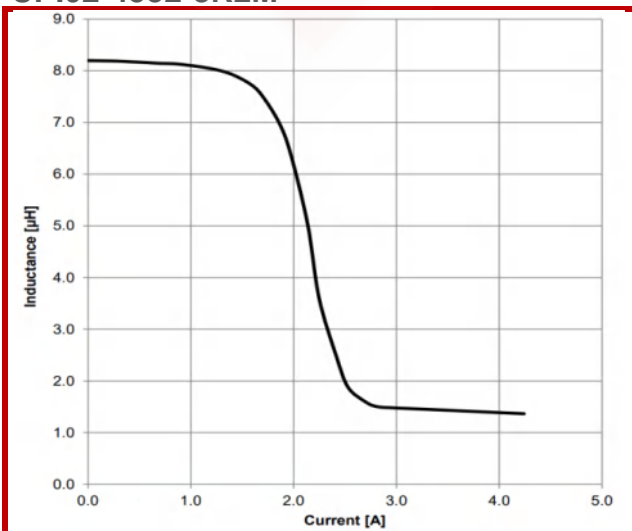
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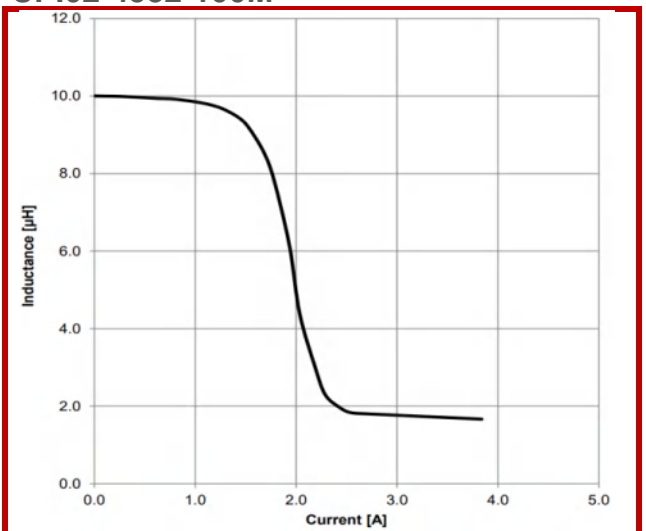
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**UPI02-4532-8R2M**



**UPI02-4532-100M**

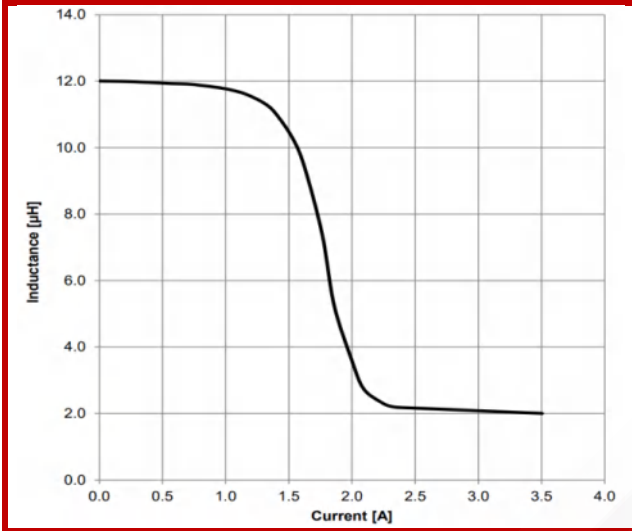




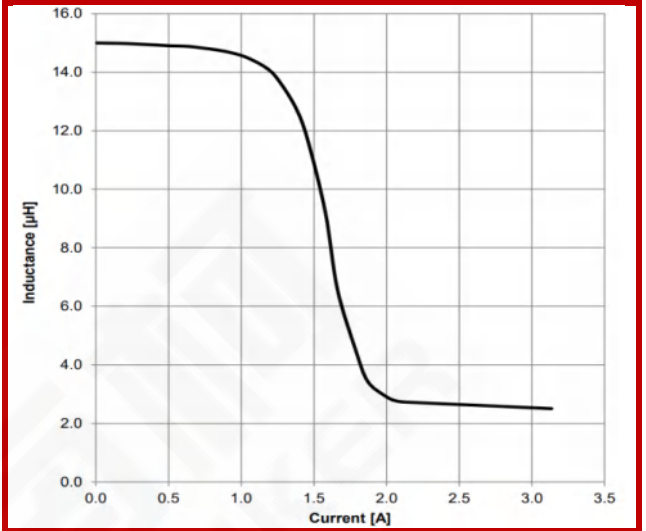
### 典型电感与电流特性

Typical Inductance vs. Current Characteristics

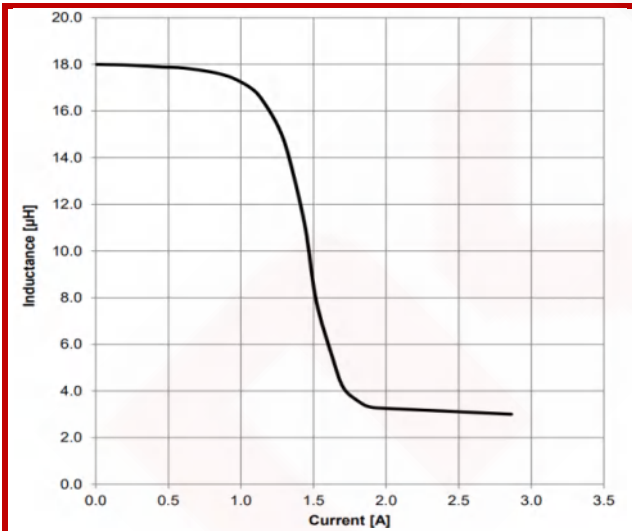
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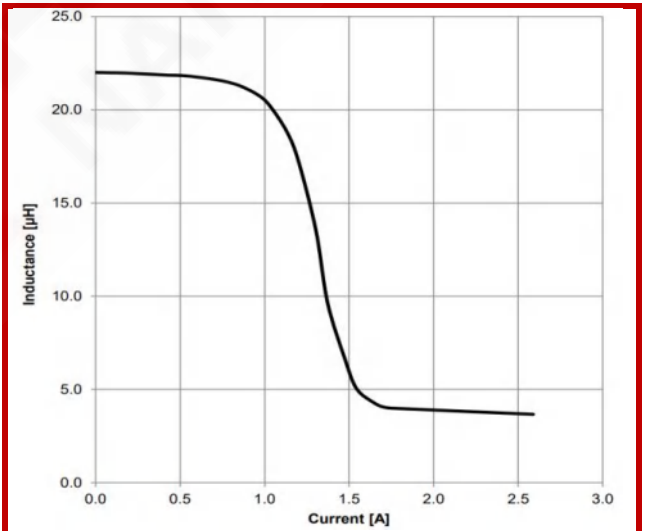
UPI02-4532-150M



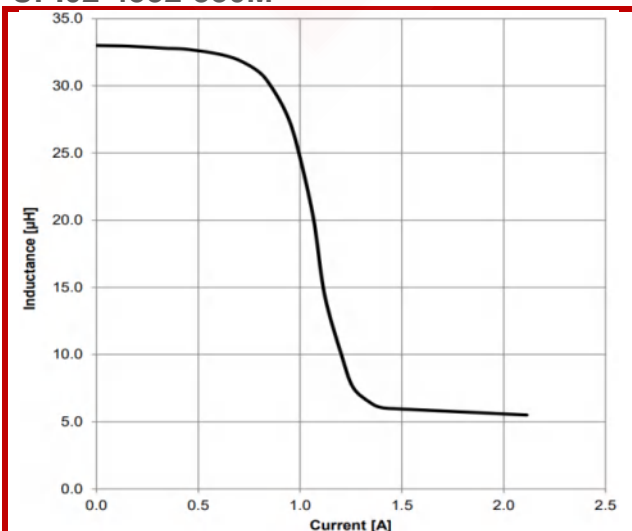
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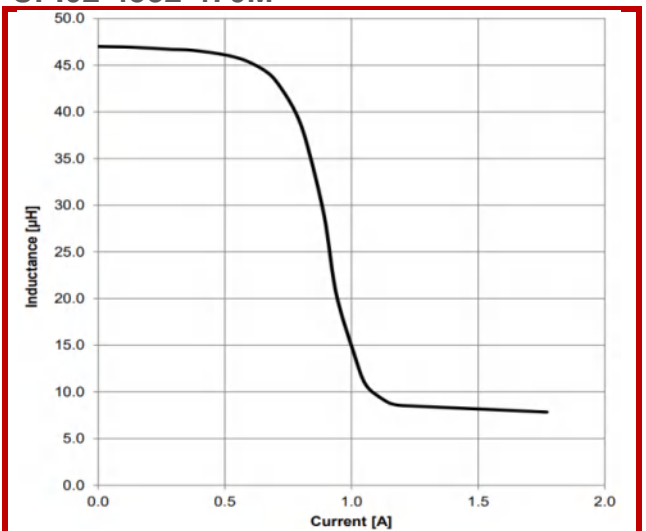
UPI02-4532-220M



UPI02-4532-330M



UPI02-4532-470M



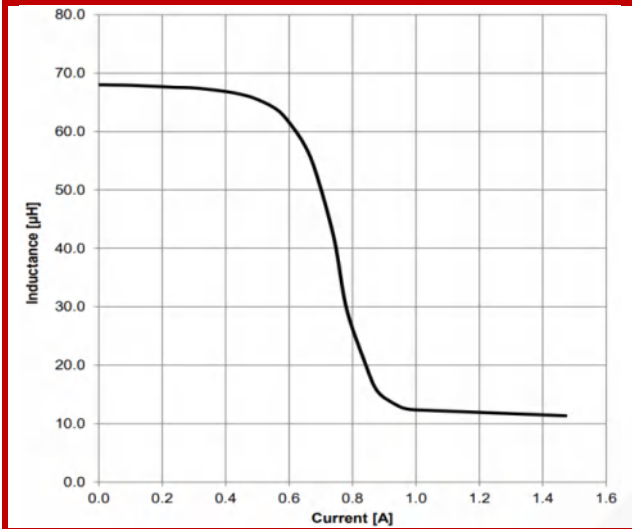




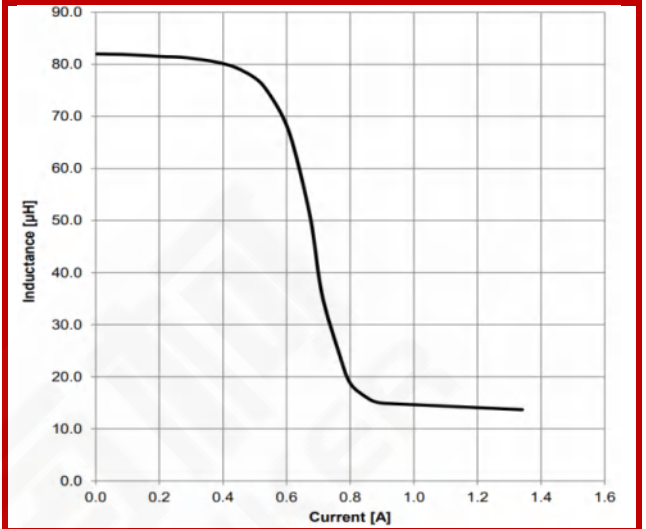
### 典型电感与电流特性

Typical Inductance vs. Current Characteristics

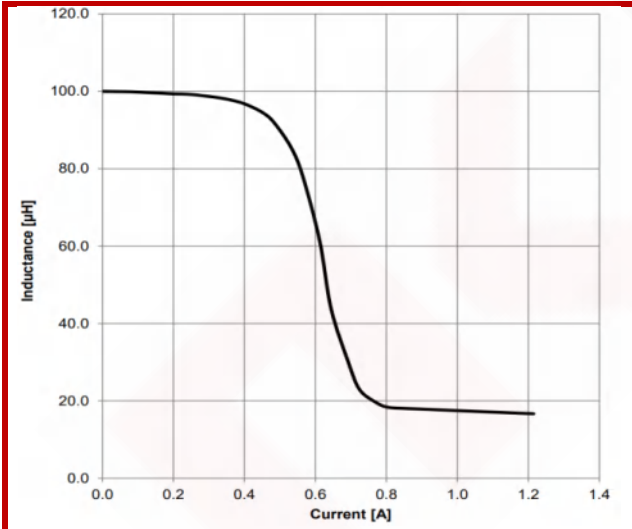
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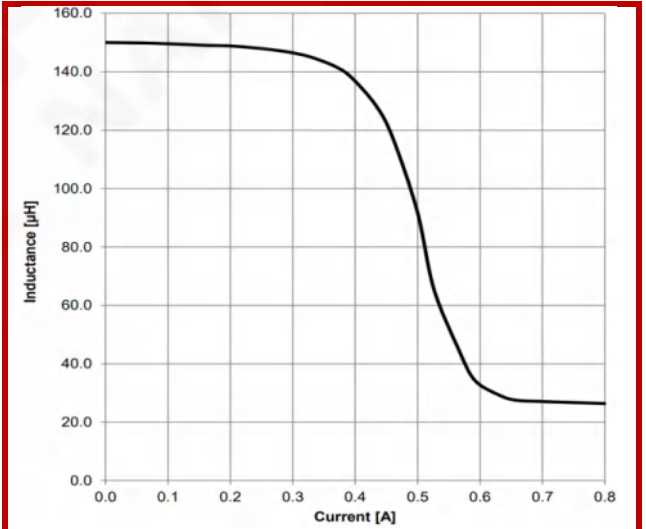
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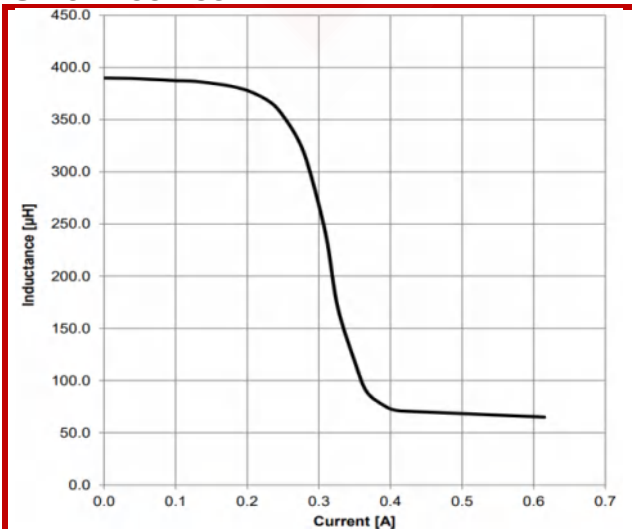
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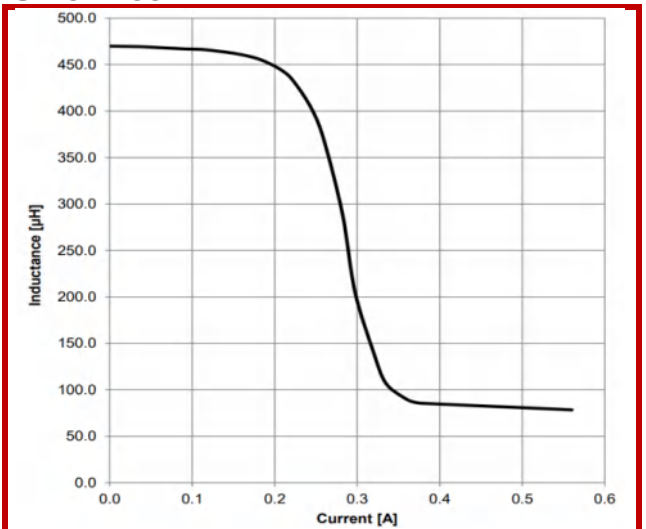
**UPI02-4532-151M**



**UPI02-4532-391M**



**UPI02-4532-471M**

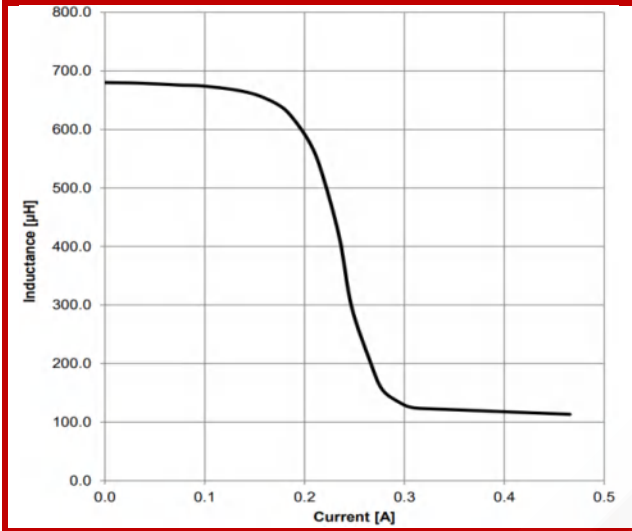




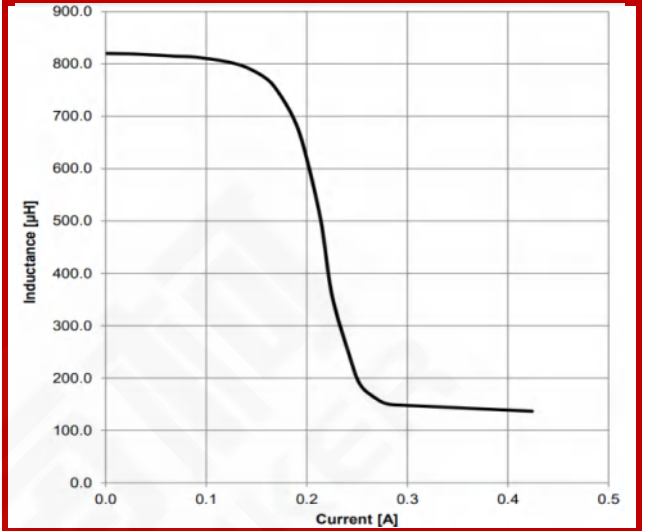
### 典型电感与电流特性

Typical Inductance vs. Current Characteristics

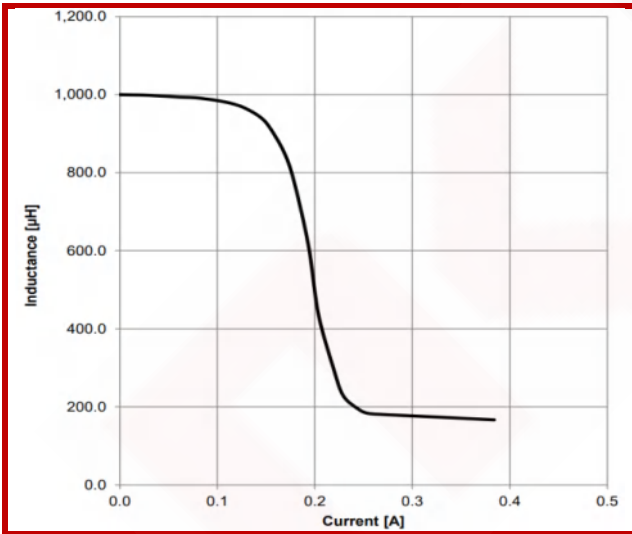
**UPI02-4532-681M**



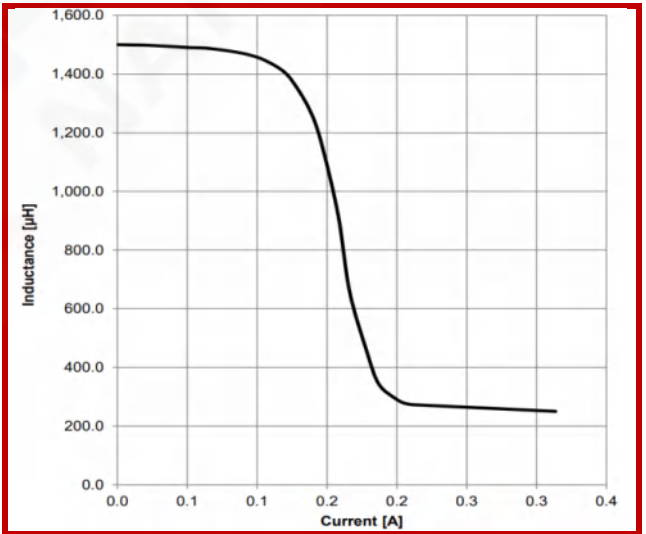
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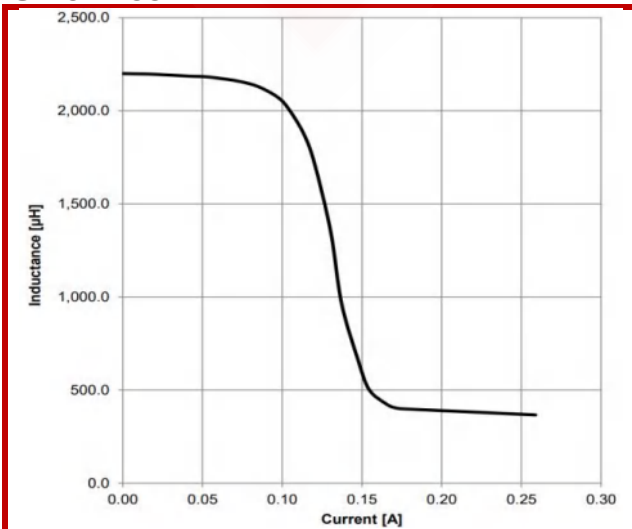
**UPI02-4532-102M**



**UPI02-4532-152M**



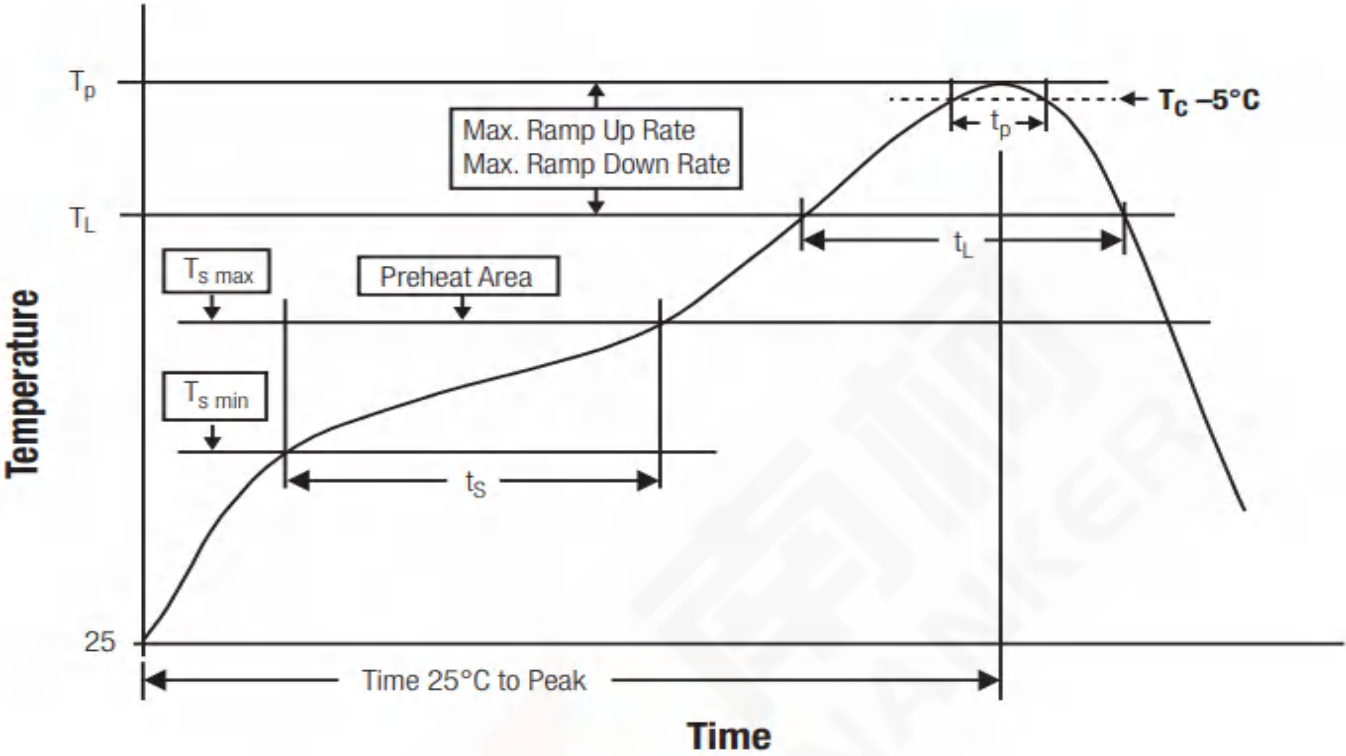
**UPI02-4532-221M**





回流焊曲线图

Classification Reflow Profile for SMT Components



封装体峰值温度(T<sub>p</sub>)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.