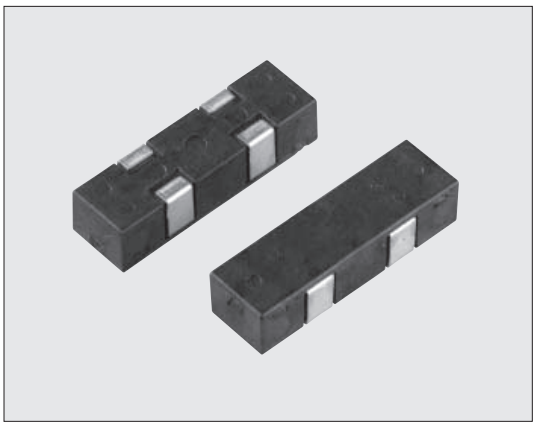
TRANSPONDER COILS

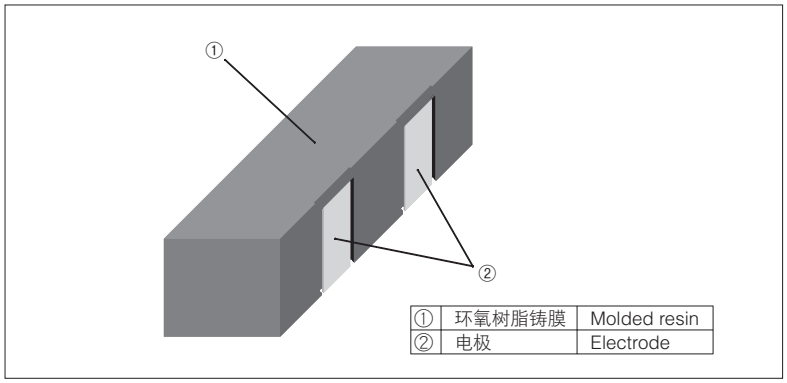
新 EU RoHS

KT11835 应答器线圈（接收）
Transponder coils (Rx)



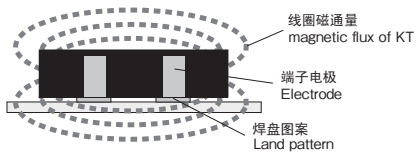
外观颜色： 黑色　Body color: Black

■ 结构图　Construction

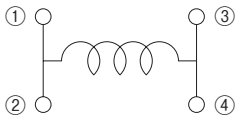


■ 特点　Features

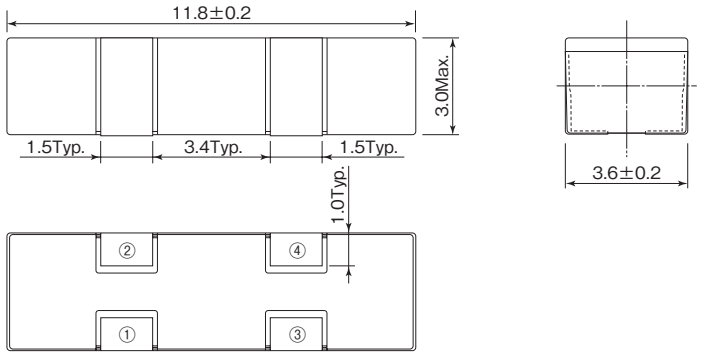
- 长边电极配置环氧树脂封装的无线异频线圈。
- 电极和焊盘对磁通量影响小，Q值，电感度高。
- 4个端子电极和环氧树脂封装的结构，耐振动，抗冲击，耐基板弯曲性好。
- 相对于环境温度变化L值变化小。
- 对应回流焊。
- 符合欧盟RoHS。
- AEC-Q200相关数据已取得。
- Transponder coil that is arranged it's electrode in the long side of the part, and is covered with molding resin.
- Excellent high Q and high sensitivity, because neither the electrode nor the land pattern disturb the coil flux.
- Strong to vibration, shock and substrate bend test by 4 electrode terminals structure and the molded resin.
- Small inductance change to environmental temperature change.
- Suitable for reflow soldering.
- Products meets EU-RoHS requirements.
- AEC-Q200 qualified.



■ 电路构成　Circuit Consruction



■ 外形尺寸　Dimension（mm）



■ 用途　Applications

- 接收用LF天线线圈用
  - 胎压监测系统
  - 智能钥匙系统
  - 引擎自锁系统
  - RF-ID
- Receiving LF anttena coil for shown below.
  - Tire Pressure monitoring system
  - Smart key system
  - Immobilizer system
  - RF-ID

■ 品名构成　Type Designation

实例　Example

KT	11835	T	TEG	722	J
品种 Product Code	形状 Style	端子表面材质 Terminal Surface Material	二次加工 Taping	公称电感 Nominal Inductance	允许偏差 Tolerance
	L×W×H (mm) 11.8×3.6×3.0	T：Sn	TEG：Plastic embossed BK：Bulk	3 digits	G：±2% H：±3% J：±5%

■ 额定值　Ratings

使用温度范围　Operating temperature range: −40℃～+125℃ (包含自身的温升。Self-heating is included.)
※线圈上面部分的温度 (环境温度+自身发热) 须在工作温度上限 (+125℃) 以下。
※That the operating temperature upper limit temperature of the coil winding portions (ambient temperature+self-heating) is (+125℃) or less.
包装数量/卷　Q'ty/Reel: 2,500pcs

型　号 Type	公称电感 Nominal Inductance (mH)	电感允许偏差 Inductance Tolerance	空载Q值 Unload Quality Factor Min.	L, Q测定频率 L, Q Measuring Frequency (kHz)	自共振频率 Self Resonant Frequency (kHz) Min.	直流电阻 DC Resistance (Ω) Max.	允许直流电流 Allowable DC Current (mA) Max.	感　度 Sensitivity (mV/uT) Typ.
KT11835TTEG242□	2.4	G：±2% H：±3% J：±5%	32	125	700	32	30	28
KT11835TTEG402□	4.0		36		600	45	25	35
KT11835TTEG502□	5.0		32		800	75	22	40
KT11835TTEG722□	7.2		40		750	92	15	55
KT11835TTEG123□	12		45		500	119	12	75

在□中填入电感允许偏差记号（G、H、J）。 The code for inductance tolerance (G, H, J) enters □.
对应12mH以下的电感值。 Any other inductance under 12mH is available.

■ 特性　Characteristics

测定器 Test equipment：Agilent 4294A impedance analyzer

L－f特性　L－Frequency Characteristics

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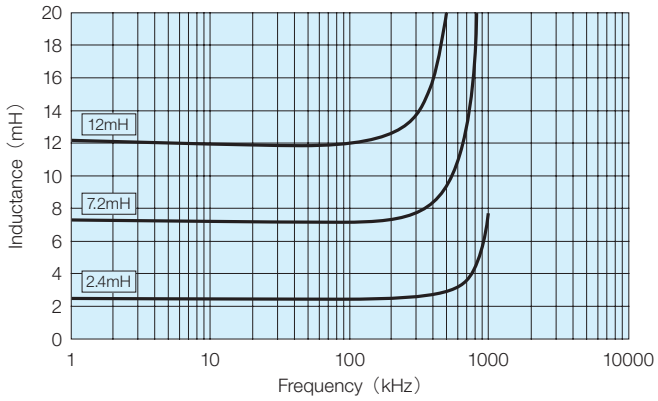
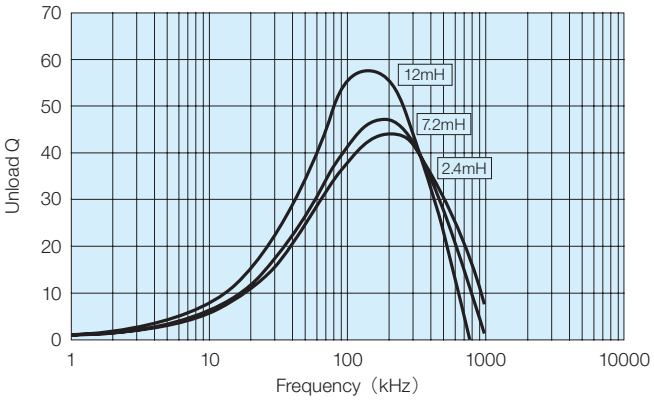
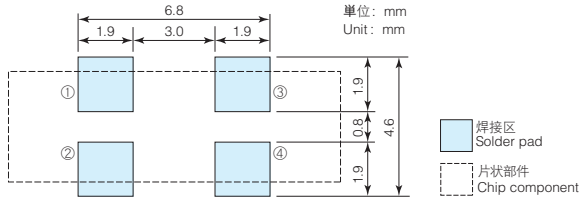


Q－f特性　Q－Frequency Characteristics

KT11835



■ 标准焊接尺寸　Standard Soldering Pad Dimensions

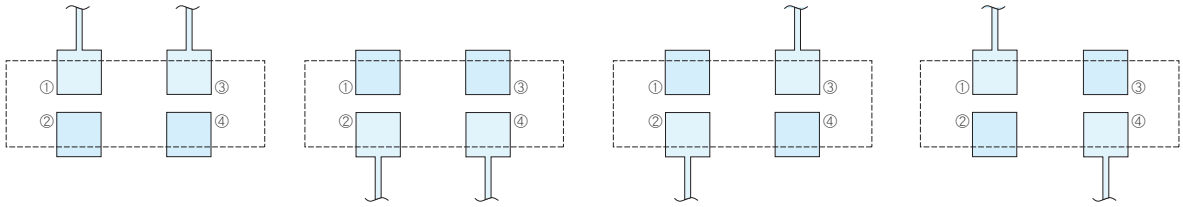


※标准焊接尺寸为标准焊盘，不能对特性进行保证。使用前请确认。

This pad dimension is only for standard pattern and the characteristics are not guaranteed, which you are suggested to confirm before use.

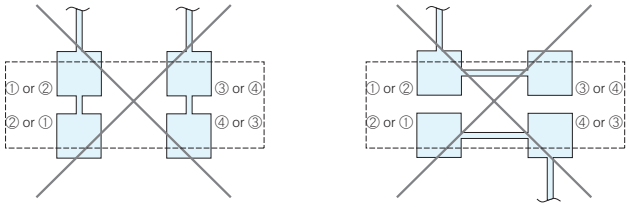
■ 焊盘配线图　Wiring diagram of solder pad

● 推荐配线例　Recommended wiring example



● 不推荐配线例　Non-recommended wiring example

请避免以下配线因为会导致L和Q值降低 Please avoid the following wiring because it lead to decrease of L and Q.



1-2之间，3-4之间连接
Connection between ① and ②, and/or ③ and ④.

1-3之间，2-4之间连接
Connection between ① and ③, and/or ② and ④.

■ 性能　Performance

试验项目 Test Items	标准值 Performance Requirements ⊿L/L		试验方法 Test Methods
	保证值 Limit	代表值 Typical	
耐焊接热 Resistance to soldering heat	⊿L/L：±2% 外观应无显著异常。 No significant abnormality in appearance	⊿L/L：±1%	260℃±5℃、10s±1s
温度突变 Rapid change of temperature	⊿L/L：±2% 外观应无显著异常。 No significant abnormality in appearance	⊿L/L：±1%	−40℃（30min.）/+125℃（30min.）、100 cycles
低温放置 Low temperature exposure	⊿L/L：±2% 外观应无显著异常。 No significant abnormality in appearance	⊿L/L：±1%	−40℃±2℃、1000h
高温放置 High temperature exposure	⊿L/L：±2% 外观应无显著异常。 No significant abnormality in appearance	⊿L/L：±1%	+125℃±2℃、1000h
耐湿性 Moisture endurance	⊿L/L：±2% 外观应无显著异常。 No significant abnormality in appearance	⊿L/L：±1%	+60℃±2℃、90～95%RH、1000h
温度特性 Temperature characteristics	⊿L/L：±3% 外观应无显著异常。 No significant abnormality in appearance	⊿L/L：±2%	+20℃→−40℃、+20℃→+125℃