数字功放电感器

——CKDE1623 系列

背景

D类数字功放电感是一种利用D类数字信号处理的定向电感，其特性具备传统的振荡电路所拥有的低噪声、低杂散电容和高能量效率等优点。电感作为反馈环节的关键部件，对功放出现差振、斜坡型反馈等常见问题影响很大，因此，开发出低噪音、低杂散及高能效的D类数字功放电感，将有助于提高D类数字功放的失真率和频率响应，为电子市场的发展增加新的维度。

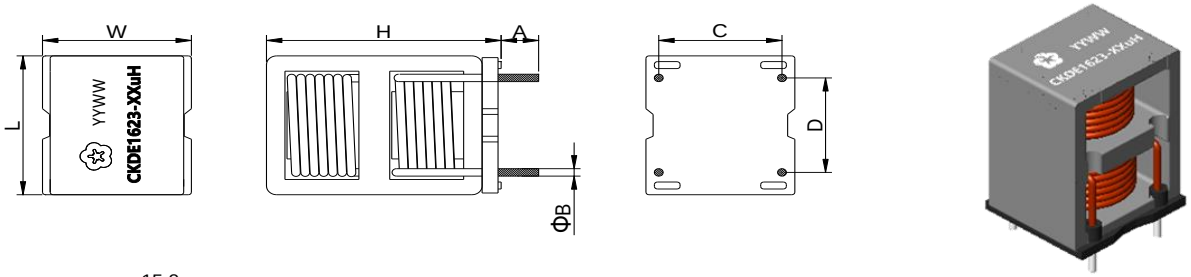
产品特点：

1. 组立式2合1结构设计，节省空间；
2. 使用低损耗锰锌铁氧体磁芯，磁芯损耗低，耐大电流；
3. 磁路闭合，低蜂鸣噪音；

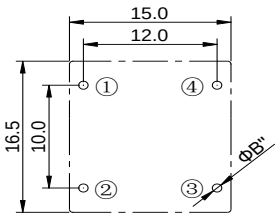
产品应用：

1. 最适合作为数字放大器（D类放大器）的LPF电感器
2. 支持家庭影院、AV接收器、小型组件等的高输出

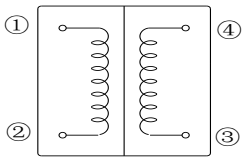
外形尺寸 (Unit:mm)



Inductance	B(mm)	B"(mm)
10uH	0.9	1.2
15uH	0.7	1.0
20uH	0.65	0.9



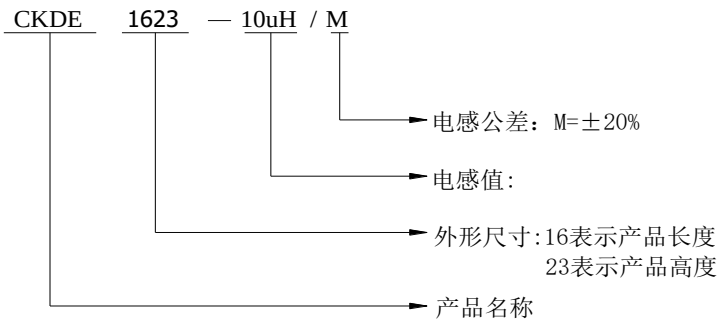
参考焊盘尺寸



原理图

TYPE(型号)	L	W	H	A	C	D
CKDE1623	16.5Max	15.0Max	23.0Max	3.5±0.5	12.0±0.5	10.0±0.5

品 名



Electrical Properties

CKDE1623 Series

Part Number	Inductance	DC Resistance		Self-resonant Frequency	Saturation Current (Isat)	Rated Current (Irms)
Units	μH	mΩ		MHz	A	A
Tol	±20%	Typ	Max	Typ	Typ	Typ
CKDE1623-10uH/M	10.0	9.0	12.0	20.0	15.0	6.4
CKDE1623-15uH/M	15.0	18.2	22.6	14.0	11.0	5.2
CKDE1623-20uH/M	20.0	22.7	31.0	12.9	10.0	3.8

Note:

※1: All test data is reference to 25℃ ambient.

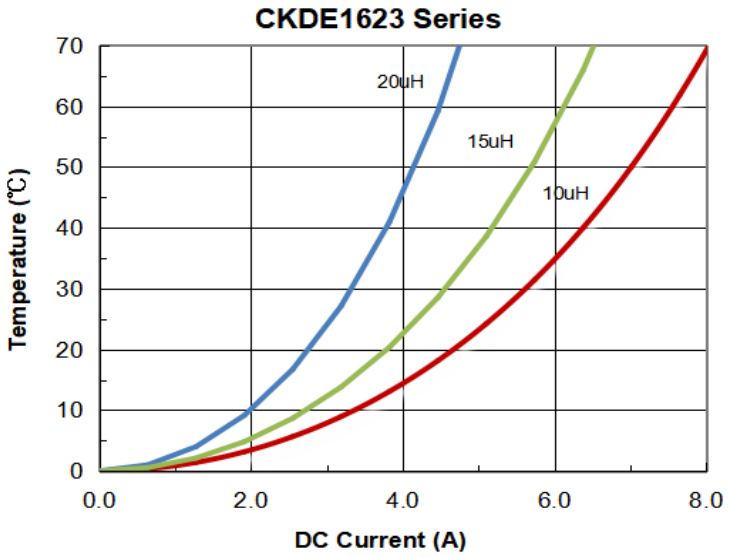
※2: Test Condition：100kHz，0.1Vrms

※3: ISaturation current：the actual value of DC current when the inductance decrease 25% of its initial value.

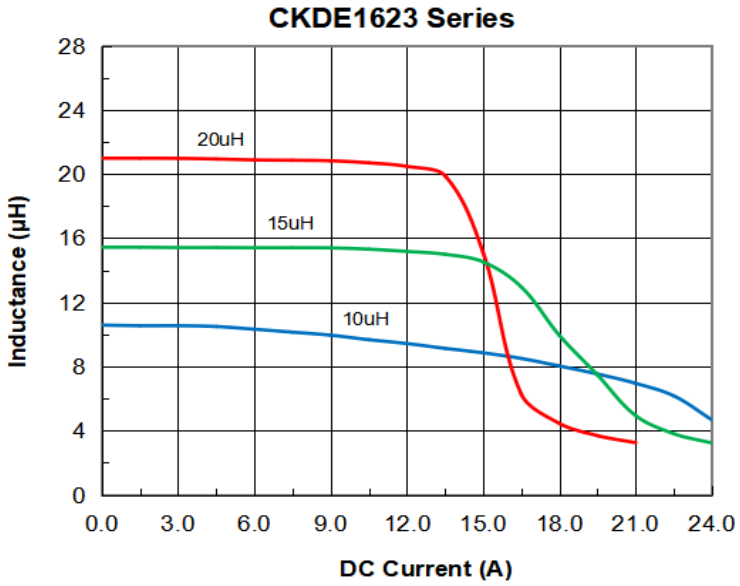
※4: Temperature rise current：the actual value of DC current when the temperature rise is ΔT40℃(Ta=25℃).

※5: Special remind：Circuit design, component placement, PCB size and thickness, cooling system and etc. all will affect the product temperature. Please verify the product temperature in the final application.

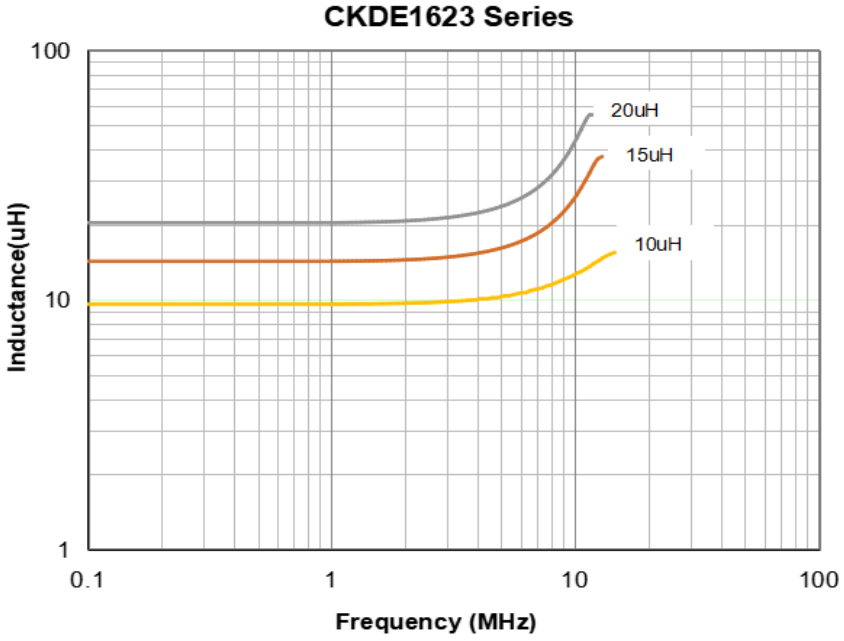
Temperature Rise vs Current



L vs Current

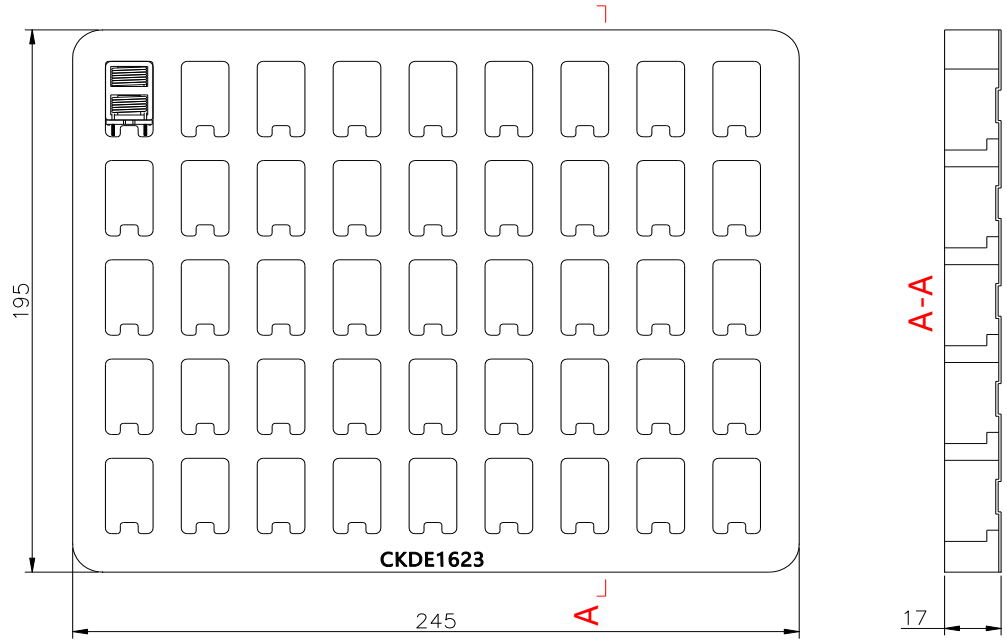


L vs Frequency



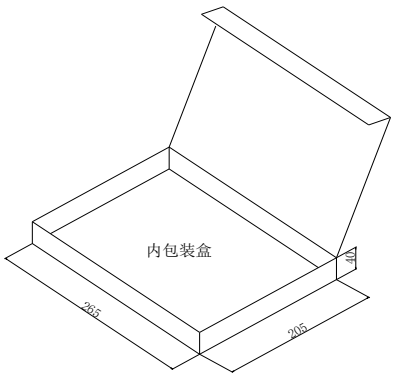
包装规范

吸塑盘尺寸 (mm)

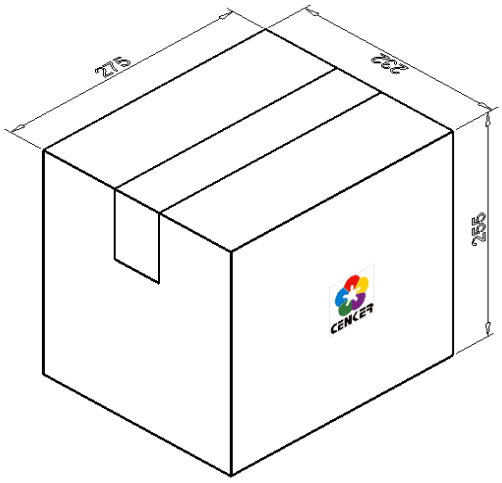


包装数量：45pcs/盘

内盒和外箱尺寸 (mm)



2吸塑盘装1个内盒=90pcs/Box



6个内盒装1外箱=540pcs/Carton