有关本公司产品的注意事项

请务必在使用本公司产品目录之前阅读。

⚠ 注意事项

- 本产品目录中记载的内容是至2013年10月的内容。本产品目录记载的内容由于产品的改良等原因发生变更时，恕不另行通知。在您定购我司产品之前请确认最新的产品信息。
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- 有关详细的产品规格我们准备有《交货规格书》，请向我司咨询相关事宜。

- 在您使用我司产品时，请务必进行应用设备实装状态以及应用产品实际使用环境下的测评。

- 本产品目录中记载的电子元器件，电路产品等产品适用于一般电子设备。
  『AV设备，OA设备，家电及办公设备，信息/通讯设备（手机，电脑等）』
  当您计划把本产品目录中记载的产品使用于可能会危及第三方生命安全的应用设备时，请务必提前与我公司取得联系，针对产品信息加以确认。
  【运输用设备（火车控制设备，船舶控制设备等），交通用信号设备，防灾设备，医疗用设备，公共性高的信息通信设备等（电话程控交换机，电话，无线电，电视信号等基地局）】

  另外，请不要在要求高度安全性，可靠性的应用设备上使用本产品目录中记载的产品。【航天设备，航空设备，核控制设备，用于海底的设备，军事设备等】

  同时，应用于安全性，可靠性要求较高的一般电子设备/电路时，请充分进行安全性测评，必要时请在设计过程中追加保护电路。

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- 有关出口的注意事项
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多层片状EMI抑制滤波器

回流焊

■型号标示法　　※使用温度范围：-25～+85℃

【T Series】

F	K	2	1	2	5	T	△	2	5	6	A	L	—	T	△
①		②				③	④				⑤	⑥	⑦		⑧

△＝空格

①类型

代码	类型
FK	多层片状 EMI 抑制滤波器

②尺寸（L×W）

代码	外型（inch）	尺寸（L×W）[mm]
2125	2125（0805）	2.0×1.25

③等价电路

代码	等价电路
T	T 型

④截止频率

代码（例）	截止频率
△186	18 MHz
△256	25 MHz

⑤衰减特性

代码（例）	衰减特性
A	陡峭的衰减特性

⑥额定电压

代码	额定电压[V]
L	10

⑦包装

代码	包装
-T	卷盘带装

⑧本公司管理记号

代码	本公司管理记号
△	标准品

【TZ Series】

F	K	2	1	2	5	T	Z	2	0	1	C	8	5	0	T	△
①		②				③	④				⑤				⑥	⑦

△＝空格

①类型

代码	类型
FK	多层片状 EMI 抑制滤波器

②尺寸（L×W）

代码	外型（inch）	尺寸（L×W）[mm]
2125	2125（0805）	2.0×1.25

③等价电路

代码	等价电路
T	T 型

④标称阻抗值

代码	标称阻抗值[100MHz]
Z700	70Ω
Z101	100Ω
Z201	200Ω

⑤标称静电容量

代码	标称静电容量[1MHz]
C170	17pF
C500	50pF
C850	85pF

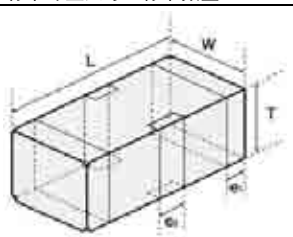
⑥包装

代码	包装
T	卷盘带装

⑦本公司管理记号

代码	本公司管理记号
△	标准品

■标准外型尺寸／标准数量



L	W	T	e^1	e^2	标准数量[pcs] 压纹带
2.0±0.2 (0.079±0.008)	1.25±0.2 (0.049±0.008)	1.0±0.2 (0.039±0.008)	0.3±0.2 (0.012±0.008)	0.4±0.2 (0.016±0.008)	3000

单位：mm（inch）

■型号一览

●T系列

型号	EHS	截止频率[MHz]	衰减特性								直流电阻[Ω](max.)	额定电压[V](DC)	额定电流[mA](DC)	绝缘阻抗[MΩ]
			插入损耗[1MHz]	衰减量										
				50MHz	100MHz	200MHz	350MHz	500MHz	600MHz	800MHz				
FK2125T 186AL-T	RoHS	18±3.6	≦1.0dB	≧20dB	≧20dB	–	–	≧20dB	–	–	2	10	100	≧30
FK2125T 256AL-T	RoHS	25±5	≦1.0dB	≧15dB	≧20dB	–	–	≧20dB	–	–	2	10	100	≧30
FK2125T 406AL-T	RoHS	40±10	≦1.0dB	–	≧15dB	≧20dB	–	≧20dB	–	–	2	10	100	≧30
FK2125T 107AL-T	RoHS	100±20	≦1.0dB	–	–	≧20dB	–	≧20dB	–	–	3	10	100	≧30
FK2125T 167AL-T	RoHS	160±30	≦1.0dB	–	–	–	≧20dB	≧20dB	–	–	2	10	100	≧30
FK2125T 207AL-T	RoHS	200±40	≦1.0dB	–	–	–	≧20dB	≧20dB	–	–	2	10	100	≧30
FK2125T 407AL-T	RoHS	400±80	≦1.0dB	–	–	–	–	–	≧20dB	≧20dB	2	10	100	≧30

●TZ系列

型号	EHS	阻 抗(端子1-3)[100MHz]	静电容量(端子1-2)[1MHz]	直流电阻[Ω](max.)	额定电压[V](DC)	额定电流[mA](DC)	绝缘阻抗[MΩ]
FK2125TZ700C170T	RoHS	70Ω±30%	17pF±20%	2	10	100	≧30
FK2125TZ700C500T	RoHS	70Ω±30%	50pF±20%	2	10	100	≧30
FK2125TZ700C850T	RoHS	70Ω±30%	85pF±20%	2	10	100	≧30
FK2125TZ101C170T	RoHS	100Ω±30%	17pF±20%	2	10	100	≧30
FK2125TZ101C500T	RoHS	100Ω±30%	50pF±20%	2	10	100	≧30
FK2125TZ101C850T	RoHS	100Ω±30%	85pF±20%	2	10	100	≧30
FK2125TZ201C850T	RoHS	200Ω±30%	85pF±20%	2	10	100	≧30

■PACKAGING

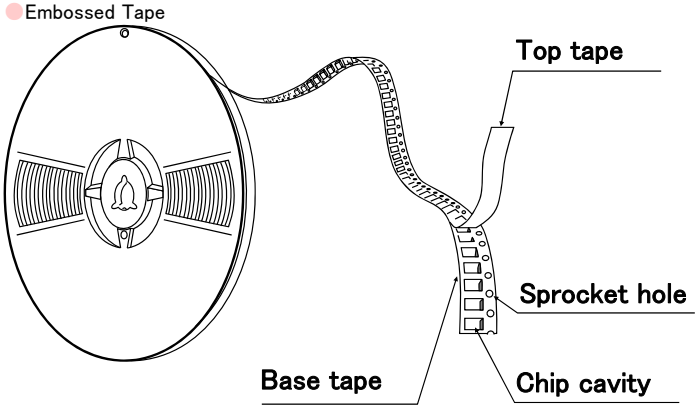
①Minimum Quantity

●Taped package

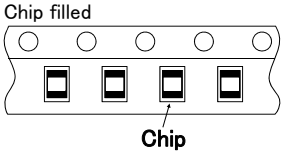
Type	Thickness mm(inch)	Standard Quantity [pcs]
		Embossed tape
FK 2125(0805)	1.0(0.039)	3000

②Tape material

●Embossed Tape

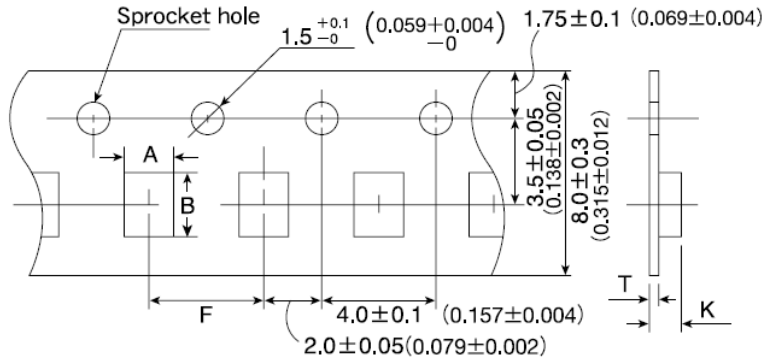


Chip filled



③Taping dimensions

●Embossed tape 8mm wide

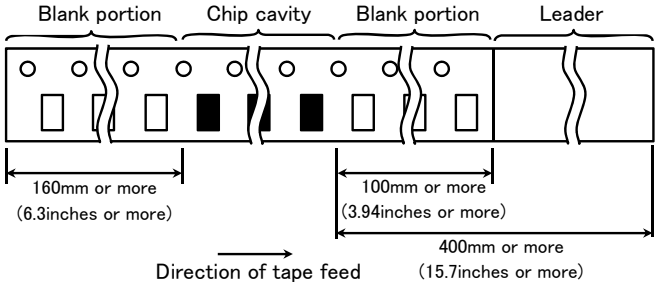


Unit : mm(inch)

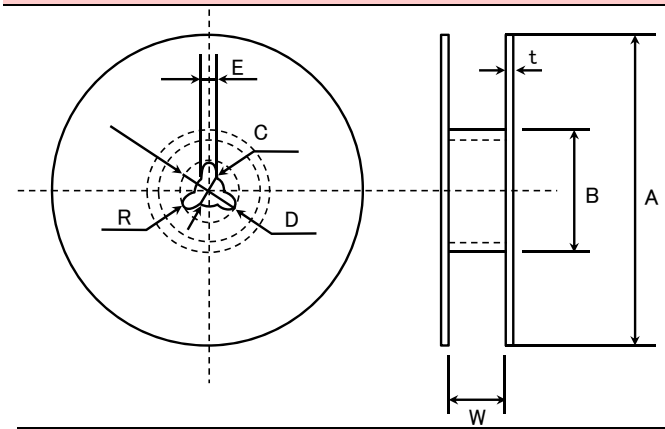
Type	Chip cavity		Insertion pitch	Tape thickness	
	A	B	F	K	T
FK 2125(0805)	1.5±0.2 (0.059±0.008)	2.3±0.2 (0.091±0.008)	4.0±0.1 (0.157±0.004)	2.0 max. (0.079 max.)	0.3 max. (0.012 max.)

Unit : mm(inch)

④Leader and Blank portion



⑤Reel size

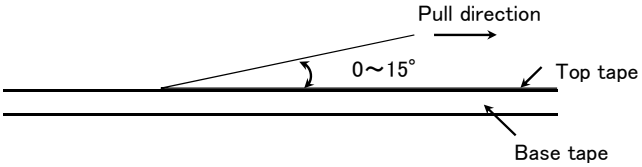


A	B	C	D	E	R	t	W
ϕ178±2.0	ϕ50min.	ϕ13.0±0.2	ϕ21.0±0.8	2.0±0.5	1.0	2.5max.	10±1.5

Unit : mm

⑥Top tape strength

The top tape requires a peel;-off force of 0.1～0.7N in the direction of the arrow as illustrated below.



MULTILAYER EMI SUPPRESSION FILTERS

■RELIABILITY DATA

1. Operating Temperature Range	
Specified Value	−25～＋85℃

2. Storage Temperature Range	
Specified Value	−25～＋85℃

3. Rated Voltage	
Specified Value	10V DC

4. Rated Current	
Specified Value	100mA DC

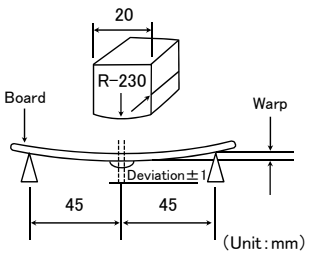
5. Cutoff frequency (T Series)	
Specified Value	18MHz±3.6MHz, 25MHz±5MHz, 40MHz±10MHz, 100MHz±20MHz, 160MHz±30MHz, 200MHz±40MHz, 400MHz±80MHz
Test Methods and Remarks	Measuring equipment : 8753D (or its equivalent) Measuring source : 0dBm Input-Output impedance : 50Ω

6. Impedance (TZ Series)	
Specified Value	70Ω±30%, 100Ω±30%, 200Ω±30%
Test Methods and Remarks	Measuring frequency : 100MHz Measuring equipment : 4291A (or its equivalent) Measuring jig : 16192A Measuring source : −20dBm

7. Capacitance (TZ Series)	
Specified Value	17pF±20%, 50pF±20%, 85pF±20%
Test Methods and Remarks	Measuring equipment : 4194A (or its equivalent) Measuring voltage : 0.5V Measuring frequency : 1MHz Capacitance measurement between Terminals 1 and 2.

8. DC Resistance	
Specified Value	2Ω max., 3Ω max. (FK2125T107AL)
Test Methods and Remarks	Conduct measurement between Terminals 1 and 3.

9. Insulation Resistance	
Specified Value	30MΩ min.
Test Methods and Remarks	Conduct measurement between Terminals 1 and 2. Applied voltage : 10VDC

10. Resistance to Flexure of Substrate	
Specified Value	No mechanical damage.
Test Methods and Remarks	Warp : 2mm Testing board : glass epoxy-resin substrate Thickness : 0.8mm 

11. Solderability	
Specified Value	At least 75% of terminal electrode is covered by new solder.
Test Methods and Remarks	Solder temperature : 230±5℃ Duration : 4±1 sec. Preheating temperature : 150 to 180℃ Preheating time : 2 to 3 min. Flux : Immersion into methanol solution with colophony for 3 to 5 sec.

12. Resistance to Soldering	
Specified Value	No significant abnormality in appearance.
Test Methods and Remarks	Solder temperature : 260±5℃ Duration : 10±0.5 sec. Preheating temperature : 150 to 180℃ Preheating time : 2 to 3 min. Flux : Immersion into methanol solution with colophony for 3 to 5 sec.

13. Thermal Shock	
Specified Value	No mechanical damage. Insulation resistance (between 1 and 2) : 20MΩ min. DC resistance (between 1 and 3) : 2Ω max. : 3Ω max. (FK2125T107AL)
Test Methods and Remarks	Conditions for 1 cycle

Step	Temperature (℃)	Duration (min)
1	Minimum operating temperature +0/−3	30±3
2	Room temperature	2 to 3
3	Maximum operating temperature +3/−0	30±3
4	Room temperature	2 to 3

Number of cycles : 5
Recovery : 2 to 3 hrs of recovery under the standard condition after the test.

14. Damp Heat steady state	
Specified Value	No mechanical damage. Insulation resistance (between 1 and 2) : 20MΩ min. DC resistance (between 1 and 3) : 2Ω max. : 3Ω max. (FK2125T107AL)
Test Methods and Remarks	Temperature : 40±2℃ Humidity : 90 to 95%RH Duration : 500±12 hrs Recovery : 2 to 3 hrs of recovery under the standard condition after the removal from test chamber.

15. Loading under Damp Heat	
Specified Value	No mechanical damage. Insulation resistance (between 1 and 2) : 20MΩ min. DC resistance (between 1 and 3) : 2Ω max. : 3Ω max. (FK2125T107AL)
Test Methods and Remarks	Temperature : 40±2℃ Humidity : 90 to 95%RH Applied voltage : Rated voltage (between 1 and 2) Applied current : Rated current (between 1 and 3) Duration : 500±12 hrs Recovery : 2 to 3 hrs of recovery under the standard condition after the removal from test chamber.

16. Loading at High Temperature	
Specified Value	No mechanical damage. Insulation resistance (between 1 and 2) : 20MΩ min. DC resistance (between 1 and 3) : 2Ω max. : 3Ω max. (FK2125T107AL)
Test Methods and Remarks	Temperature : 85±2℃ Applied voltage : Rated voltage (between 1 and 2) Applied current : Rated current (between 1 and 3) Duration : 500±12 hrs Recovery : 2 to 3 hrs of recovery under the standard condition after the removal from test chamber.

Note on standard condition :

"standard condition" referred to herein is defined as follows :

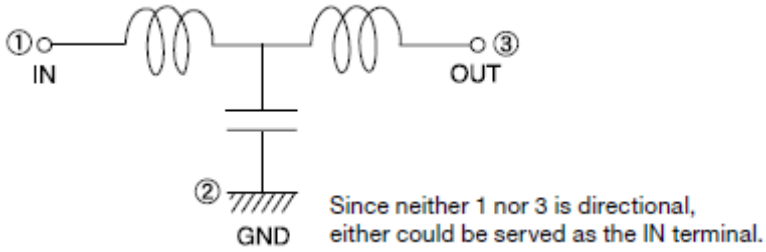
5 to 35℃ of temperature, 45 to 85% relative humidity and 86 to 106kPa of air pressure.

When there are questions concerning measurement results :

In order to provide correlation data, the test shall be conducted under condition of 20±2℃ of temperature, 60 to 70% relative humidity and 86 to 106kPa of air pressure.

Unless otherwise specified, all the tests are conducted under the "standard condition."

※Circuit diagram



Since neither 1 nor 3 is directional,
either could be served as the IN terminal.