

Operating temperature -40°C to +150°C

### FEATURES

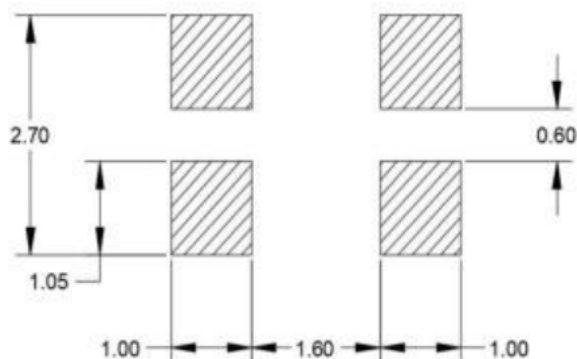
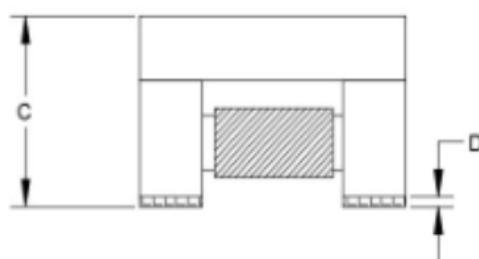
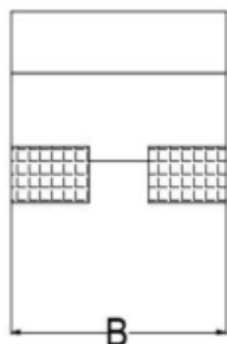
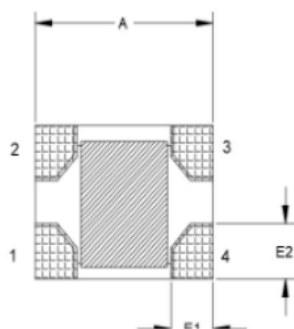
- Compliant with ROHS requirements
- Compliant with Halogen Free requirement
- Excellent Solderability
- AEC-Q200 Verified
- Common mode noise filtering for automotive CAN-BUS and signal line



### PRODUCT IDENTIFICATION

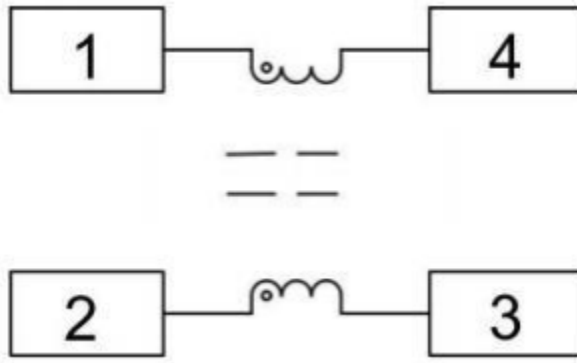
SA	CM	3225	NF	510	T
①	②	③	④	⑤	⑥
①	SA	Type	②	CM	Type
		On-Vehicle Series			Common Mode Choke Coil
③	3225	Type	④	NF	Type
		Dimension 3.2*2.5			Material Ferrite Core
⑤	510	Type	⑥	T	Type
		Impedance			Taping and Reel

### SHAPE AND DIMENSIONS



Series	A(mm)	B(mm)	C(mm)	D(mm)	E1(mm)	E2(mm)
3225NF	3.2±0.5	2.5±0.2	2.1±0.2	0.15±0.1	0.75±0.1	0.9±0.1

# EQUIVALENT CIRCUIT

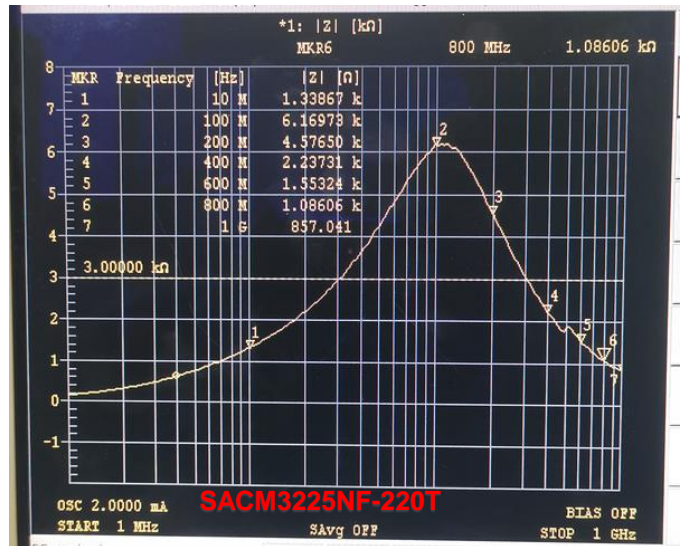
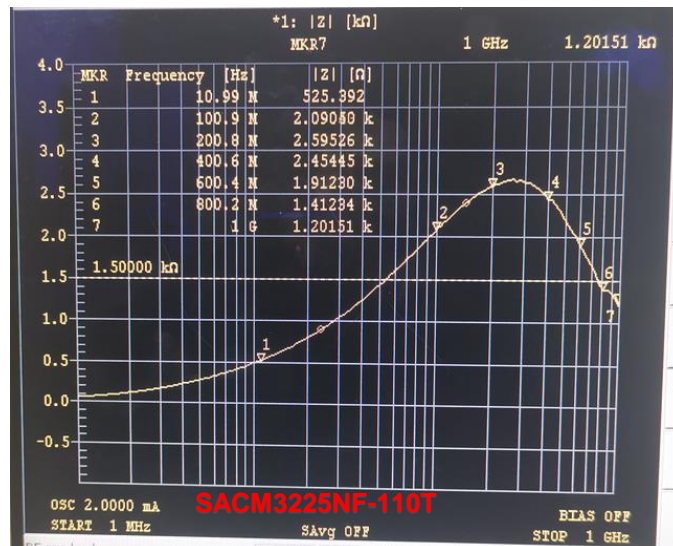
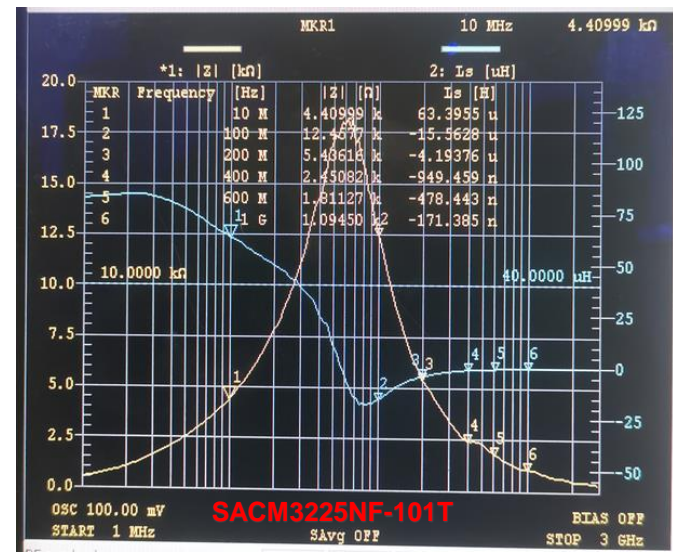


## ELECTRICAL SPECIFICATIONS @25°C

Part Number	Inductance	Common Mode Impedance	DC Resistance	Rated Current	Rated Voltage	Insulation Resistance
	+50%/-30%					
Units	uH	Ω	Ω	mA	Volts	MΩ
Symbol	L		DCR	I <sub>r</sub>	VDC	IR
SACM3225NF-101T	100	2200 at 10M	2.2	150	80	10
SACM3225NF-510T	51	1000 at 10M	1.5	200	80	10
SACM3225NF-220T	22	500 at 10M	0.5	250	80	10
SACM3225NF-110T	11	300 at 10M	0.4	300	80	10
SACM3225NF-102T	/	1000 at 100M	0.5	800	80	10
SACM3225NF-201T	200	9000 at 10M	5.5	70	80	10
SACM3225NF-242T	/	2400 at 100M	0.4	300	80	10

✂Products with other electrical characteristics can be provided according to customer requirements. Please contact our sales staff

## TYPICAL ELECTRICAL CHARACTERISTICS



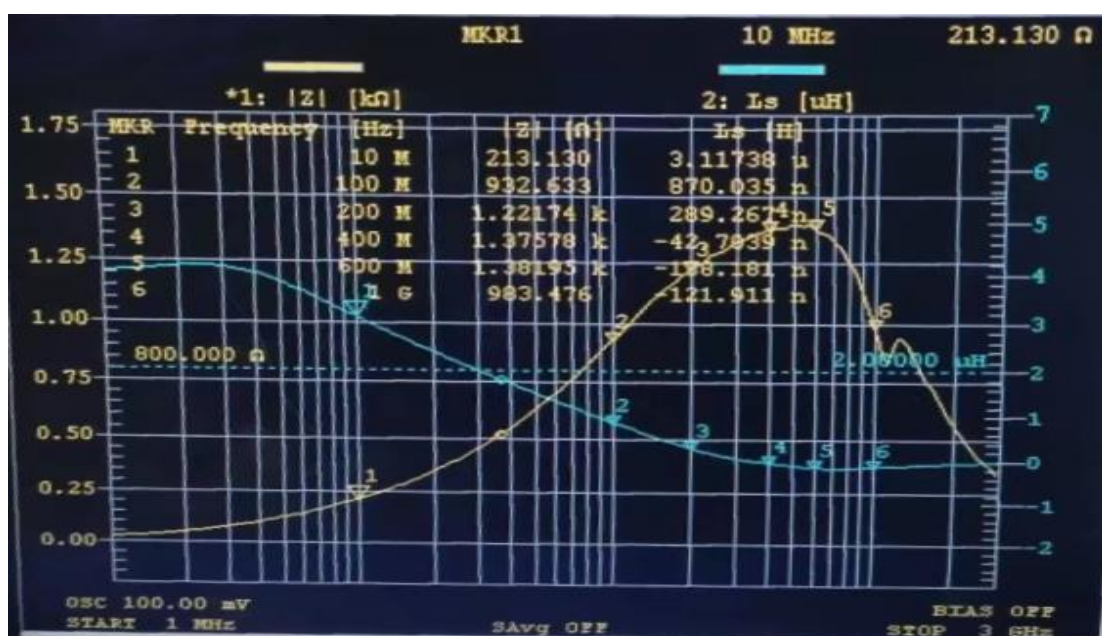
Measurement equipment

Product No: 4991A

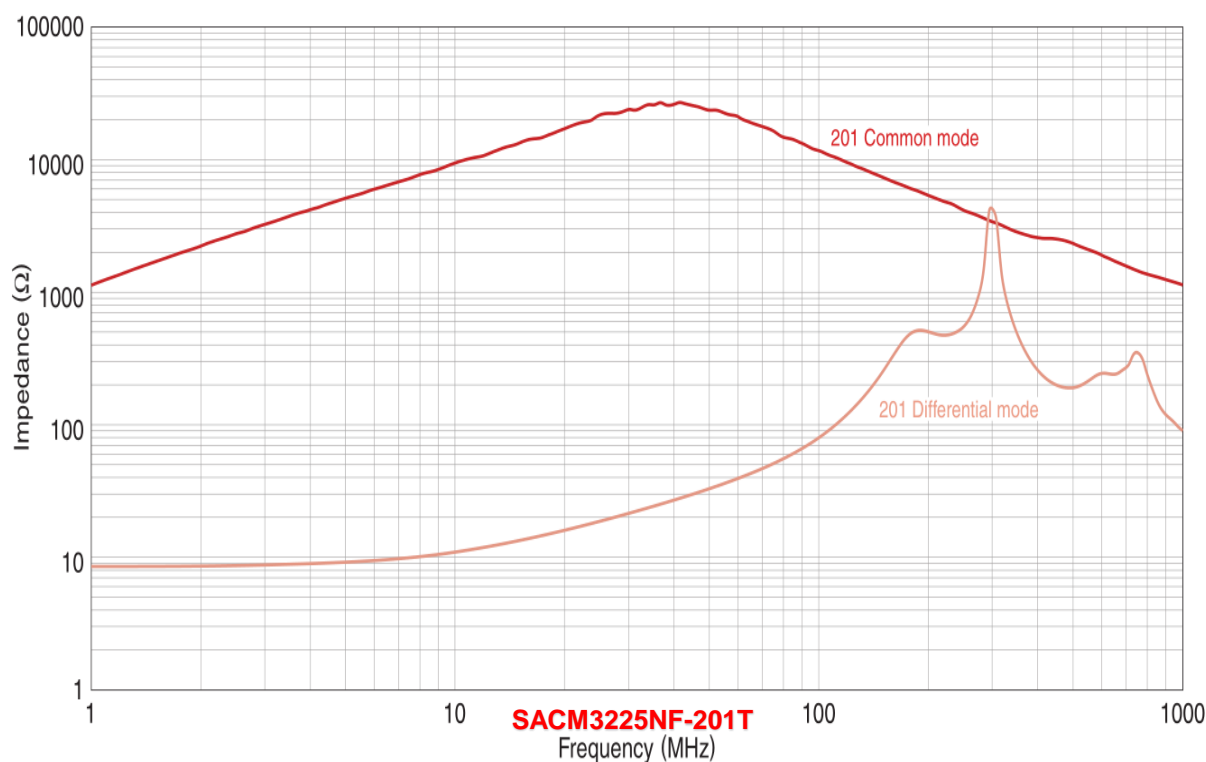
Manufacturer: Keysight Technologies

Specifications subject to change without notice. Please check our website for latest information. Revised 2023/06/08

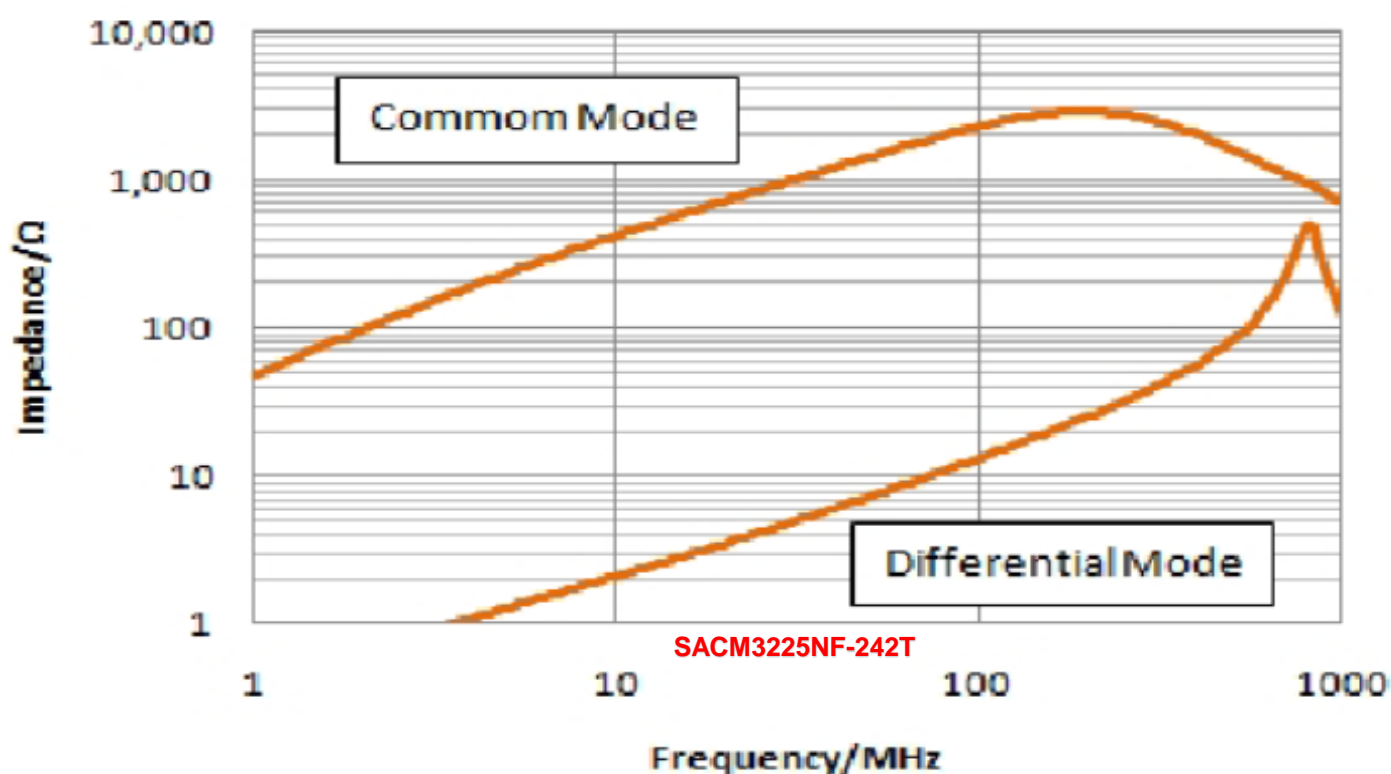
# TYPICAL ELECTRICAL CHARACTERISTICS



**SACM3225NF-102T**



**SACM3225NF-201T**



**SACM3225NF-242T**

Measurement equipment

Product No: 4991A

Manufacturer: Keysight Technologies

Specifications subject to change without notice. Please check our website for latest information. Revised 2023/06/08



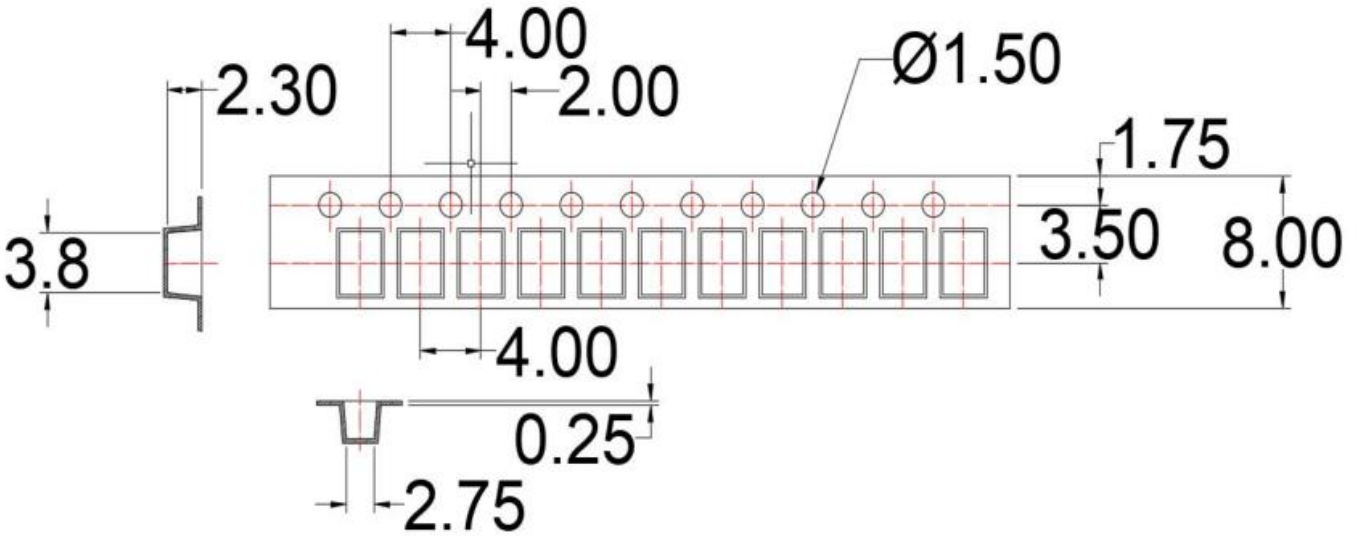
# RELIABILITY DATA

编号 No.	试验项目 Test Item	测试条件 Test Conditions	检验标准 Inspection standards	样品数量 Sample QTY	样品序号 Sample serial number	测试结果 Test Result
1	高温存储 High Temperature Exposure(Storage)	参考: MIL-STD-202 Method 108 1) 温度: 125°C 2) 时间: 1000小时 Refer to: MIL-STD-202 Method 108 Samples are stored at 125°C heat for 1000 hours	试验后电气特性符合规格值 Electrical performance parameters are within specifications.	80pcs	1-80	pass
2	温度循环 Temperature Cycling	参考: JESD22 Method JA-104 1) 温度: -40°C 至 125°C 2) 每 30 分钟停留 3) 1000 个循环 Refer to: JESD22 Method JA-104 Low temperature: -40°C; High temperature: 125°C; 30min maximum dwell time at each temperature extreme; 1 min maximum transition; Number of cycles: 1000 hours	试验后电气特性符合规格值 Electrical performance parameters are within specifications.	80pcs	81-160	pass
3	偏高湿度 Biased Humidity	参考: MIL-STD-202 Method 103 1) 温度/湿度: 85°C/85%RH 2) 时间: 1000 小时 Refer to: MIL-STD-202 Method 103 Samples are stored for 1000 hours at a temperature of 85°C and with 1000 hours	试验后电气特性符合规格值 Electrical performance parameters are within specifications.	80pcs	161-240	pass
4	工作寿命 Operational Life	参考: MIL-PRF-27 1) 温度: 125°C 2) 电流: 50mA 3) 时间: 1000 小时 Refer to: MIL-PRF-27 Load 50 mA DC at 125°C in the sample primary coil for 1000 hours.	试验后电气特性符合规格值 Electrical performance parameters are within specifications.	80pcs	241-320	pass
5	外观检测 External Visual	参考: MIL-STD-883 Method 2009) 检查产品结构、标识和工艺质量 Refer to: MIL-STD-883 Method 2009) Inspect device construction, marking and Process quality	不要求电气测试 No cracks in appearance	40pcs	321-360	pass
6	物理尺寸测试 Physical Dimension	参考: JESD22 Method JB-100 外观尺寸测试必须符合规格值 Refer to: JESD22 Method JB-100 Verify physical dimensions to the applicable device detail specification. Electrical Test not Request	不要求电气测试 No cracks in appearance	40pcs	361-400	pass
7	机械冲击 Mechanical Shock	参考: MIL-STD-202 Method 213 1) 在1500g的6个方向18个循环 Refer to: MIL-STD-202 Method 213 18 cycles each of 6 orientations at 1500g	试验后电气特性符合规格值 Electrical performance parameters are within specifications.	40pcs	401-440	pass
8	振动 Vibration Test	参考: MIL-STD-202 Method 204 1) 在 5g/s 的力 20 分钟 / 10-2000 Hz 下 3 个方向各 12 次循环 Refer to: MIL-STD-202 Method 204 12 cycles each of 3 orientations at 5g's/ 0.5" / 10-2000 Hz.	试验后电气特性符合规格值 Electrical performance parameters are within specifications.	40pcs	441-480	pass
9	耐焊接热 Resistance to soldering heat	参考: MIL-STD-202 Method 210 1) 焊锡温度: 260±5°C 2) 时间: 10±1s 3) 深度: 1.27mm Refer to: MIL-STD-202 Method 210 Condition B, 260°C±5°C	1. 试验后电气特性符合规格值 2. 外观无异常 1. Electrical performance parameters are within specifications. 2. No physical damage.	40pcs	481-520	pass
10	可焊性 Solderability	参考: J-STD-002 1) 水蒸8小时后浸锡 2) 温度: 255°C ±5°C 3) 深度: 0.10mm 4) 时间: 5s+0.5s/-0 Refer to: J-STD-002 Condition 1: Method B, 4hrs @ 155°C, dry heat @ 235°C Condition 2: Method B, category 3 (8hrs steam) @ 215°C Condition 3: Method D, category 3 (8hrs steam) @ 260°C	1. 测试样品引脚上的锡覆盖率最低为95%, 并且很明亮 2. 试验后电气特性符合规格值 1. The tin coverage on the test sample pins was a minimum of 95% and was bright. 2. Electrical performance parameters are within specifications.	50pcs	521-570	pass
11	电气特性 Electrical Characterization	参照客户规格 在125°C时的高温、-40°C时的低温、25°C室温测试 Refer to: User Spec The electrical properties of the samples are measured at low temperature (-40°C), room temperature (25°C) and high temperature (125°C) after 1 hour of constant temperature	试验后电气特性符合规格值 Electrical performance parameters are within specifications.	100pcs	571-670	pass
12	弯板曲 Board Flex	参考: AEC-Q200-006 1) 1.8kg的力持续60秒 Refer to: AEC-Q200-006 The sample is soldered to the PCB and a force of 17.7N (1.8kg) is applied from the side and held for 60s	试验后电气特性符合规格值 Electrical performance parameters are within specifications.	30pcs	671-700	pass
13	耐溶剂性 Resistance to Solvents	参照: MIL-STD-202 Method 215 将样品浸泡3中不同溶剂中, 浸泡3分钟, 循环3次 注: 加入水洗化学品- OKEM清洁或等价的, 不要使用禁用溶剂。 Refer to: MIL-STD-202 Method 215 Immerse the sample in 3 different solvents for 3 minutes and cycle 3 times NOTE: Add wash chemicals - OKEM clean or equivalent, do not use Disabling solvents	样品无开裂、分离、开裂、溶胀、软化、降解等现象。 The sample has no cracking, separation, cracking, swelling, softening and degradation	10pcs	701-710	pass
14	静电放电 ESD	参考: EC-Q200-002 1) 4KV 直接接触, 25KV 空气放电 Refer to: EC-Q200-002 4KV Direct Contact, 25KV air discharge Per AEC-Q200	试验后电气特性符合规格值 Electrical performance parameters are within specifications.	20pcs	711-730	pass
15	可燃性 Flammability	参考: UL-94 根据UL-94 标准将蓝色火焰施加在样品自由端底边30分钟后移除。 Refer to: UL-94 A blue flame was applied to the bottom edge of the free end of the sample for 30 minutes according to the UL-94 standard and then removed	试验后外壳不可见有焰燃烧 No visible flaming combustion of the outer casing after the test	20pcs	731-750	pass

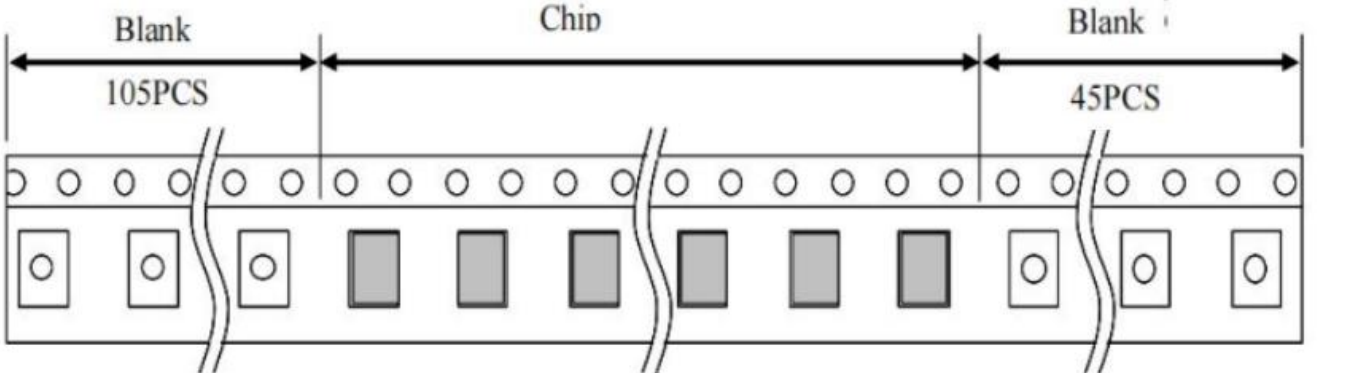
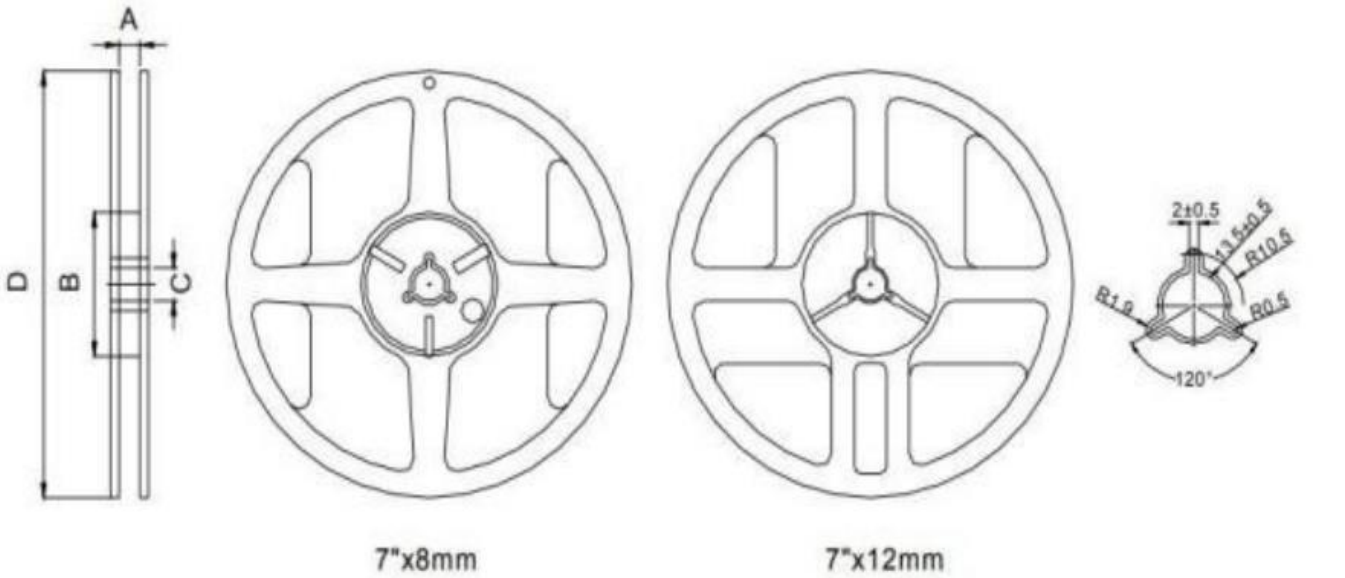
# PACKAGING STYLE

※ One Reel=2000Pcs One middle Carton=2000\*5= 10000Pcs  
 One Big Carton= 10000\*5=50000Pcs

## • Taping Dimension (Unit: mm)



## • Reel Dimension (Unit: mm)



A(mm)	B(mm)	C(mm)	D(mm)
$9.0 \pm 0.5$	$60 \pm 2$	$13.5 \pm 0.5$	$178 \pm 2$