Wire Wound Chip Common Mode Choke SACM4532 Series



Operating temperature -40°C to +125°C

FEATURES

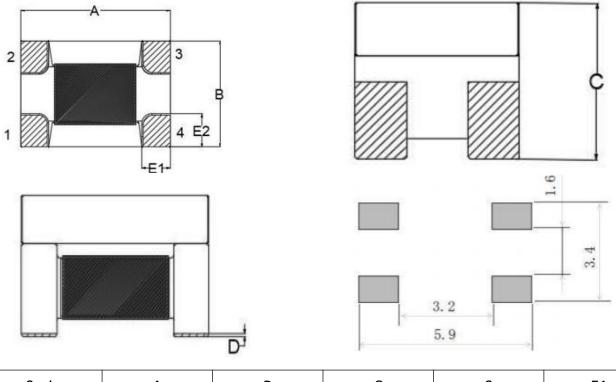
- Compliant with ROHS requirements
- Compliant with Halogen Free requirement
- Excellent Solderability
- AEC-Q200 Verified
- Common mode noise filtering for automotive CAN-BUS and signal line



PRODUCT IDENTIFICATION

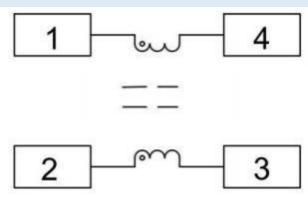
<u>S</u> ,	<u>SA</u> <u>CM</u> <u>4532</u>		<u>N</u>	<u>IF</u>	<u>510</u>	Ţ		
(1		2 3 4			(5)	6		
			Туре		_		Туре	
	SA	On-Vehicle Series		2	CM	Common Mode Choke Coil		
		Type Dimension 4.5*3.2					Туре	
3	4532			4	NF	Material Ferrite Core		
	F10	Т	уре		_	Туре		
5	510	510 Inductance		6	T	Taping and Reel		

SHAPE AND DIMENSIONS



Series	Α	В	С	S	E1
4532NF	4.5±0.2	3.2±0.2	3.05±0.2	0.15±0.1	0.8±0.1

EQUIVALENT CIRCUIT

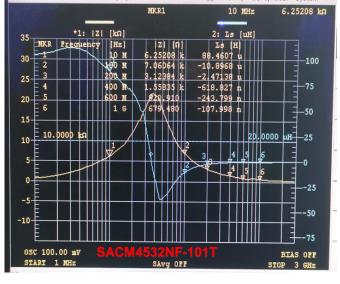


ELECTRICAL SPECIFICATIONS @25°C

Part Number	Inductance	Common Mode Impedance	DC Resistance	Rated Current	Rated Voltage	Insulation Resistance
	+50%/-30%	Min. \pm 25%	Max.	Max.	Max.	Min.
Units	uH	Ω	Ω	mA	Volts	ΜΩ
Symbol	L		DCR	lr	VDC	IR
SACM4532NF-101T	100	2000 at 10M	2.0	150	50	10
SACM4532NF-510T	51	1000 at 10M	1.0	200	50	10
SACM4532NF-220T	22	500 at 10M	1.0	200	50	10
SACM4532NF-110T	11	300 at 10M	0.6	250	50	10
SACM4532NF-201T	200	10000 at 10M	4.5	200	50	10
SACM4532NF-601T	5	600 at 100M	0.1	2500	50	10
SACM4532NF-901T	/	900 at 100M	0.07	2300	50	10
SACM4532NF-142T	/	1400 at 100M	0.1	2000	50	10

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

TYPICAL ELECTRICAL CHARACTERISTICS









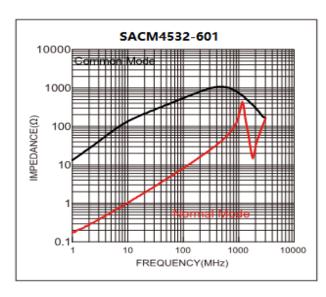
Measurement equipment Product No: 4991A

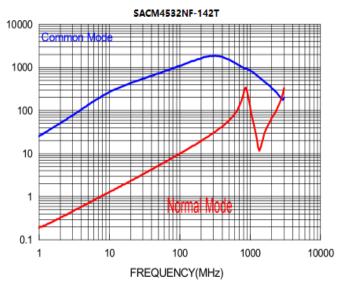
Manufacturer: Keysight Technologies

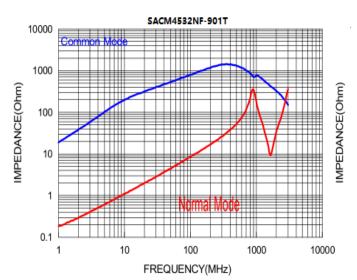
Specifications subject to change without notice. Please check our website for latest information. Revised 2023/06/08

TYPICAL ELECTRICAL CHARACTERISTICS









Measurement equipment Product No: 4991A

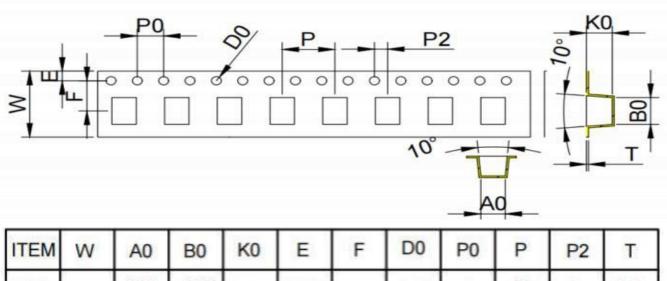
Manufacturer: Keysight Technologies

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℃ 2)时间: 1000小时 Refer to: MIL-STD-202 Method 108 Samples are stored at 125℃ 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)毎 30 分钟停留 3)1000 个循环 Refer to: JESD22 Method JA-104 Low temperature: -40 じ; 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℃ 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℃ 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 VibrationTest	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小时干后浸锡 2)温度: 255 ℃ ±5 ℃ 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

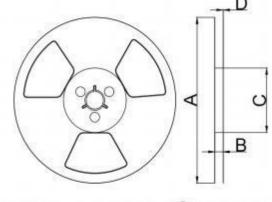
PACKAGING STYLE

Taping Dimension (Unit: mm)

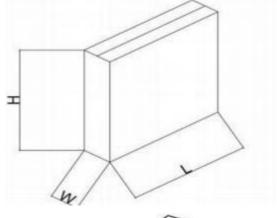


DIM	12	3.7	4.88	3.6	1.75	5.5	1.5	4	8	2	0.3
TOLE	±0.3	±0.15	±0.15	±0.15	±0.1	±0.1	+0.1	±0.1	±0.1	±0.1	±0.1

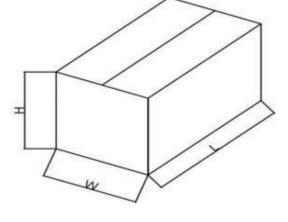
•Reel Dimension (Unit: mm)



DIM A± 2	330
DIM B+0 .8	13
DIM C±2	103
DIM D \pm 0.2	1.6



L(mm)	342±5
W(mm)	100±5
H(mm)	342±5



L(mm)	345±5
W(mm)	320±5
H(mm)	355±5