<SPECIFICATION>

SPEC.No. ASDIQ-SPE-182(00)
Date： Oct.13,2022

To :

CUSTOMER'S PRODUCT NAME

ASDI PRODUCT NAME:
ASCM3225-2-SERIES

RECEIPT CONFIRMATION

UNCONDITIONAL CONSENT	CONDITIONAL CONSENT

APPROVED	CHECKED

ASDI SIGNATURE

APPROVED	CHECKED	PREPARED
Xianglong Li	Liang Wang	Jiayin Cai

ASDI Xiamen ASDI Electronics Co.,Ltd.

REV.	DATE	DESCRIPTION	APPROVED	CHECKED	PREPARED
00	Oct.13,2022	New release	Xianglong Li	Liang Wang	Jiayin Cai

CAUTION WHEN HANDLING

Before use the products, please read this specification.

CAUTION FOR SAFETY USING

When use the products, be careful to mentioned below for safety using.

CAUTION

*The product should be used within 12 monthes.
Focus on the storage conditions.
Solderability may become weak if it exceeds the period.
*Do not use and store the product in condition of gas corrosion (Salt,Acid,Alkaline).
*The products must be preheated before soldering.
*Rework by soldering iron;Please keep the mentioned conditions in this specification.
*In case of insert P.C. Board on chassis, do not add mechanical stress to the product.
*Be careful to arrange of non-magnetic field type inductors.
The error may be caused by magnetic field coupling.
*In case handle the products, please use wrist strap for ground static discharge on human body.
The product keeps away from magnet or magnetized things.
*Do not use the product beyond the mentioned conditions in this specification.
*About an application
The products listed on this specification sheet are intended for use in general electronic equipment (AV equipment, telecommunications equipment, home appliances, amusement equipment, computer equipment, personal equipment, office equipment, measurement equipment, industrial robots) under a normal operation and use condition.
*The products are not designed or warranted to meet the requirements of the applications listed below, whose performance and/or quality require a more stringent level of safety or reliability, or whose failure, malfunction or trouble could cause serious damage to society, person or property.
Please understand that we are not responsible for any damage or liability caused by use of the products in any of the applications below or for any other use exceeding the range or conditions set forth in this specification sheet.

1)Aerospace/Aviation equipment
2)Military equipment
3)Seabed equipment
4)Safety equipment
5)Medical equipment
6)Transportation control equipment
7)Power-generation control equipment which directly endanger human life
8)Atomic energy-related equipment
9)Other applications that are not considered general-purpose applications

If you intend to use the products in the following applications, please contact our sales office.
Transportation equipment (cars, electric trains, ships, etc.), Public information-processing equipment, Electric heating apparatus / burning equipment, Disaster prevention/crime prevention equipment
When using this product in general-purpose applications, you are kindly requested to take into consideration securing protection circuit/equipment or providing backup circuits, etc., to ensure higher safety.

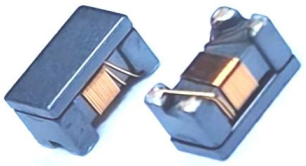
1.INDEX

2.Manufacturing Location

China

(1) Features

·High common mode impedance at high frequency effects excellent noise suppression performance.
·ASCM3225 series realizes small size and low profile 3.2*2.5*2.2 mm.
·100% Lead（Pb）& Halogen-Free and RoHS compliant.



(2) Applications

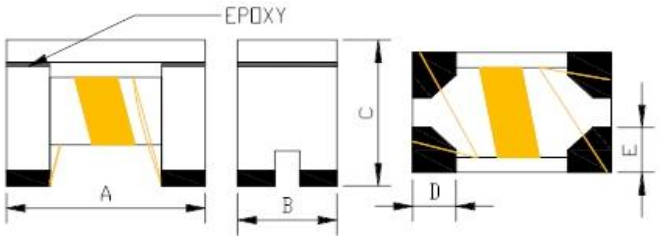
·Power switch and servers.
·Telecommunication applications.
·Countering common mode noise affecting signals in high-speed lines.
·USB communication.
·Panel link for LCD panels.

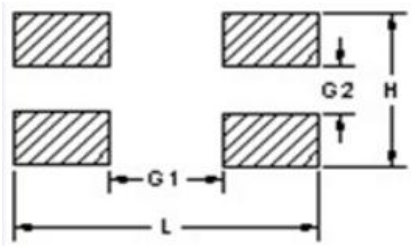
(3) Product Identification

ASCM	3225	-2	-900	T	10
①	②	③	④	⑤	⑥

①ASCM Series name
②3225 Dimension
③2 2 lines
④900 Common Mode Impedance（Ω）
⑤T Packing（Tape & Reel）
⑥10 Irms

(4) Dimensions





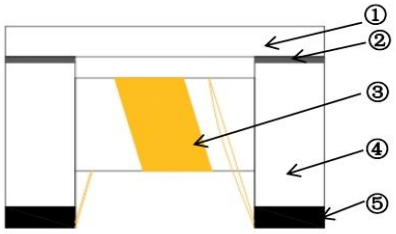
Unit:mm

Recommend Land Pattern

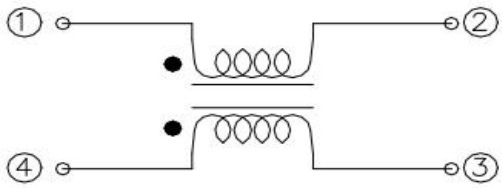
A	B	C	D	E
3.20±0.20	2.50±0.20	2.20±0.20	0.75TYP	0.90TYP
L	H	G1	G2	
3.7	2.5	2	0.6	

(5) Structure and Components

No.	Part Name	Material Name
①	Lid	Ni-Zn Ferrite
②	Epoxy	Epoxy resin
③	Wire	Enameled copper wire
④	Core	Ni-Zn Ferrite
⑤	Electrode structure	Ag+Ni+Sn plating

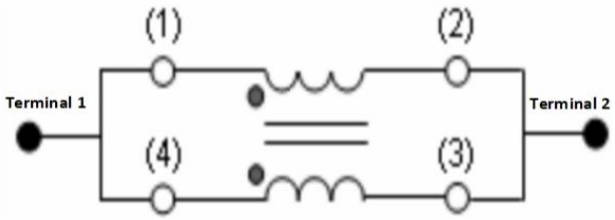


(6) Schematic Diagram

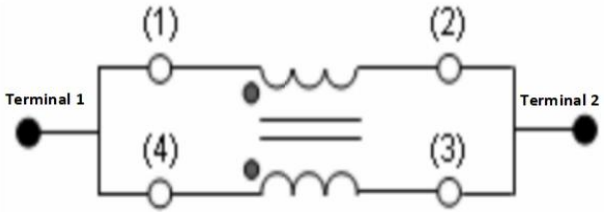


(7) MEASURING CIRCUITS 2LINE

7-1, Common mode：



7-2, Differential mode：



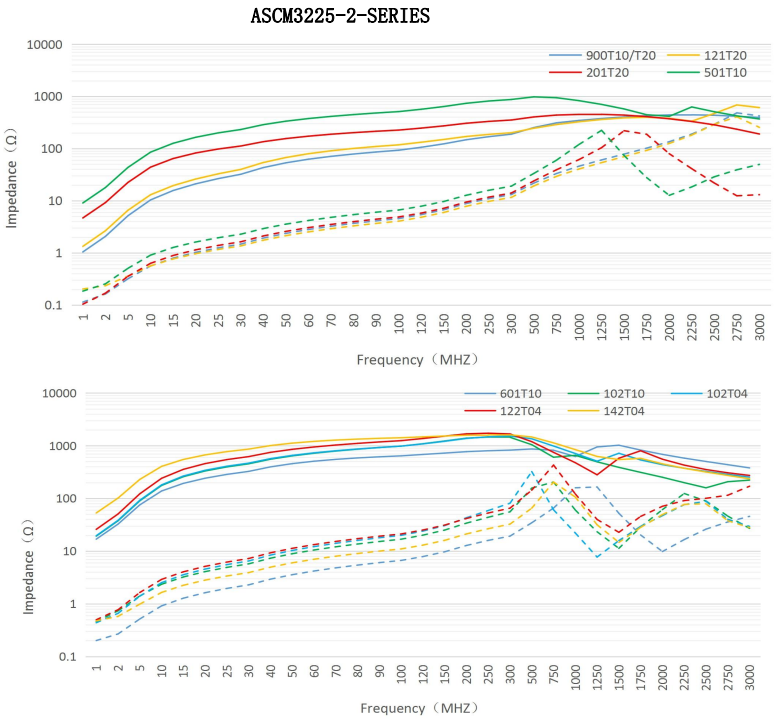
(8) Electrical Characteristics

Part No.	Z (共模阻抗) @100MHZ	DCR	IR	Rated Voltage (Vdc)	Irms
	Ω	mΩ	MΩ	V	mA
	±25%	MAX	MIN	/	MAX
ASCM3225-2-900T10	90	60	10	90	1000
ASCM3225-2-900T20	90	50	10	90	2000
ASCM3225-2-121T20	120	60	10	90	2000
ASCM3225-2-201T20	200	80	10	90	2000
ASCM3225-2-501T10	500	100	10	90	1000
ASCM3225-2-601T10	600	100	10	90	1000
ASCM3225-2-102T10	1000	100	10	90	1000
ASCM3225-2-102T04	1000	300	10	90	400
ASCM3225-2-122T04	1200	300	10	90	400
ASCM3225-2-142T04	1400	300	10	90	400

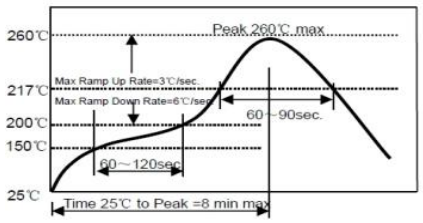
Notes

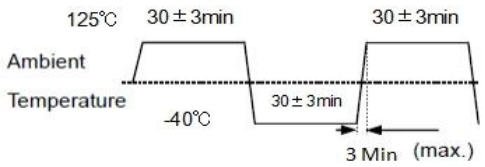
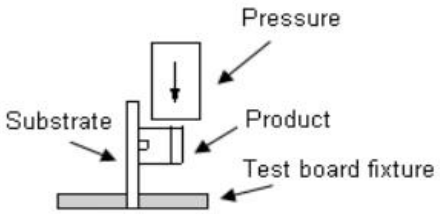
1. All test data is referenced to 25 °C ambient.
2. Operating temperature range -40 °C to + 125°C（Including self - temperature rise）.
3. Irms (A):DC current (A) that will cause an approximate ΔT of 40 °C(reference ambient temperature is 25 °C).
4. The part temperature (ambient + temp rise) should not exceed 125 °C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions. all affect the part temperature. Part temperature should be verified in the end application.

(9) Typical impedance vs. frequency



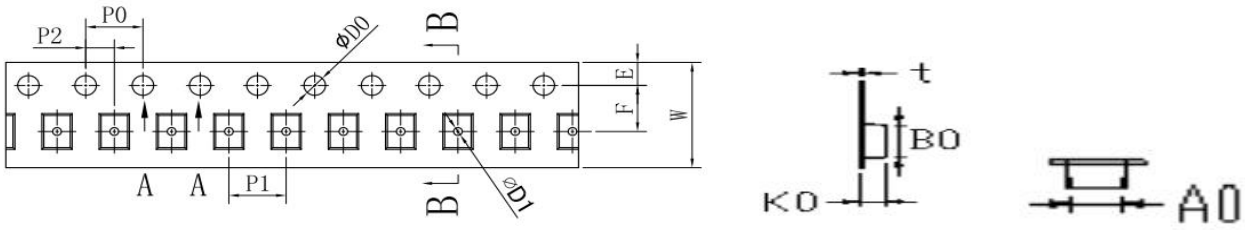
(10)Reliability Test

Test item	Performance	Test details
Operating temperature	1. No visible mechanical damage 2. Impedance change: Within±20% 3. Insulation resistance：10MΩ min	1. Reflow 2 times 2. temperature: 155± 2 ℃
Resistance to Soldering Heat	1. No visible mechanical damage 2. Impedance change: Within±20%	1. Solder on PCB to Reflow test Peak Temp. 260±5℃ 5～10 secs ,Cycles :2 times..Re-flowing Profile: Please refer to Fig-1 2. Test board thickness: 1.5mm 3. Test board material: glass epoxy resin 4. The specimen shall be stored at standard atmospheric conditions for 1 hour, after which the measurement shall be made.product showed no damage under microscope. Fig-1 
High Temperature	1. No visible mechanical damage 2. Impedance change: Within±20% 3. Insulation resistance：10MΩ min	1. Temperature: 125±2℃ 2. Duration: 1000 hours The specimen shall be stored at standard atmospheric conditions for 1 hour, after which the measurement shall be made.
Steady damp-heat	1. No visible mechanical damage 2. Impedance change: Within±20% 3. Insulation resistance：10MΩ min	1. Temperature:85℃ 2. Humidity: 85% RH 3. Duration:1000 hours 4. The specimen shall be stored at standard atmospheric conditions for 1 hour, after which the measurement shall be made.
Mechanical Vibration	1. No visible mechanical damage 2. Impedance change: Within±20%	1. Frequency: 10HZ～55HZ～10HZ/Min Cycles 2. Amplitude: 1.5 mm 3. Directions: X,Y,Z 4. Time: 2 hours in each directions (total of 6 hours)

Test item	Performance	Test details
Thermal Shock	1. No visible mechanical damage 2. Impedance change: Within±20% 3. Insulation resistance：10MΩ min	1. Temperature and time: -40℃ for 30±3 min→125℃ for 30±3min, please refer to Fig-2 2. Transforming interval: Max. 3 Min 3. Tested cycle: 1000 cycles 4. The specimen shall be stored at standard atmospheric conditions for 1 hour, after which the measurement shall be made. 
Salt Spray	1. No visible mechanical damage 2. Impedance change: Within±20%	1. Salt concentration: (5 ± 1)% (mass percent) 2. pH value:6.5 - 7.2 3. temperature: 35 ± 2 ℃ 4. humidity: 85% 5. time: 24 hours 6. in normal temperature and humidity for 1 ～ 2 hours, testing inductance, the inductance value change can not be more than before test ± 10%.
Terminal strength	No visible mechanical damage	1. The electrode of the inductor is soldered to the PCB, to Fig-3 Then apply a force in the direction of the arrow. 2. 5N force. 3. Keep time: 10(±1)s The first three tests were OK, and the force was applied until the peak value of the product peeling. The test speed was set in the range of 3 ~ 8mm/min. 

(11)Packaging Information

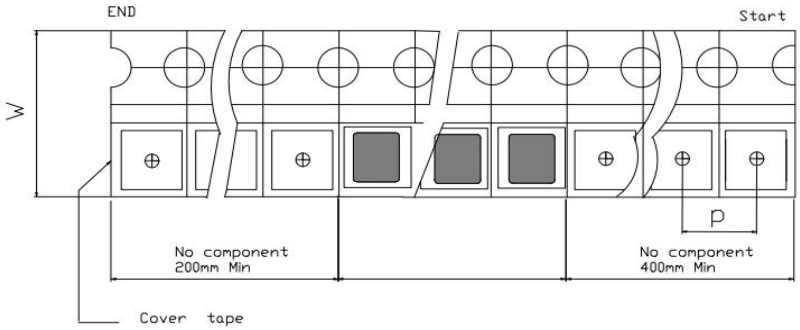
11-1, Tape Packaging Dimensions



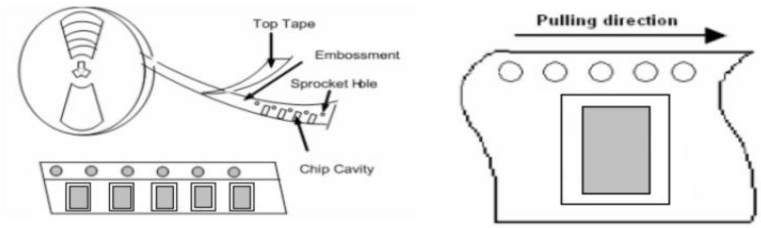
（Unit：mm）

Type	W	P1	A0	B0	K0	t	E	F	P2	D0	D1	P0
ASCM3225	8.00 ±0.10	4.00 ±0.10	2.85 ±0.10	3.65 ±0.10	2.55 ±0.10	0.26 ±0.05	1.75 ±0.10	3.50 ±0.10	2.00 ±0.10	1.55 ±0.05	0.60 ±0.05	4.00 ±0.10

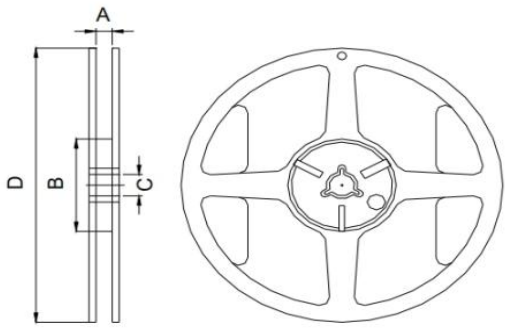
11-2, Leader and blank portion



11-3, Taping Drawings



11-4,Reel Dimensions(Unit：mm)



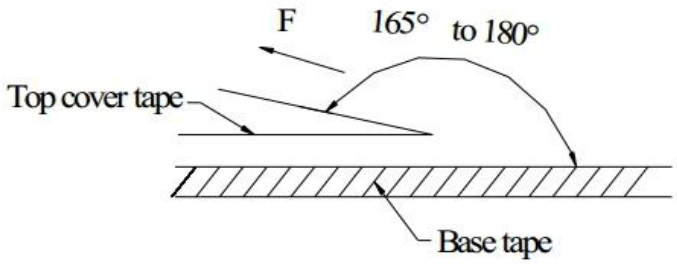
A(mm)	9.50±1.0
B(mm)	60.0±1.0
C(mm)	13.0±0.2
D(mm)	178.0±1.0

11-5,Packaging Quantity

Type	Standard Quantity		
	Reel	Inner box	Carton box
ASCM3225	1500 pcs / reel	5Reel / box (7500 pcs)	10 Middle boxes, (75000 pcs)

11-6,Peel force of top cover tape

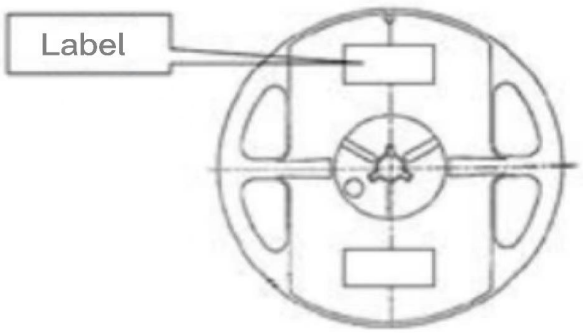
The peel speed shall be about 300mm/minute.
The peel force of top cover tape shall be between 10 to 100gf.



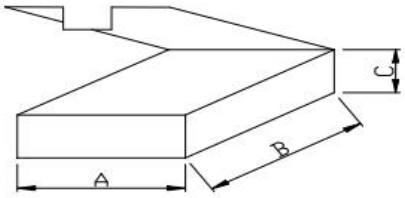
11-7,Reel Label

Label on the reel
·Customer's part Number
·Lot Number
·Quantity
·Date code

Shipping Label
·Customer's part Number
·Manufacturer's part Number
·Quantity
·Date code

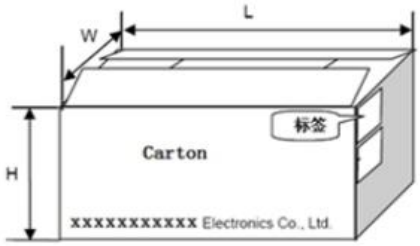


11-8,Inner Box



Packaging Type	A (mm)	B (mm)	C (mm)
Inner box	188	195	67

11-9,Carton



Packaging Type	L (mm)	W (mm)	H (mm)
Carton	390	350	215

单击下面可查看定价，库存，交付和生命周期等信息

>>ASDI