深圳市岑科实业有限公司
SHENZHEN CENKER ENTERPRISE LTD.

RoHS ✓ REACH ✓ AEC-Q200

Wire Wound Chip Common Mode Choke Coil –ACMC-S Series 片式共模绕线电感
Operating Temp. : -55℃~+150℃

● FEATURES 特性

1.Winding type realizes small size and low profile

2.High common mode impedance at high frequency cause excellent noise suppression performance

3.Excellent solderability

4.High reliability -Reliability tests comply with AEC-Q200

● APPLICATIONS 用途

1. Automotive USB 2.0/HDMI 2.0 signal transmission，Genenal singal line

● PART NUMBERING SYSTEM 品名系统

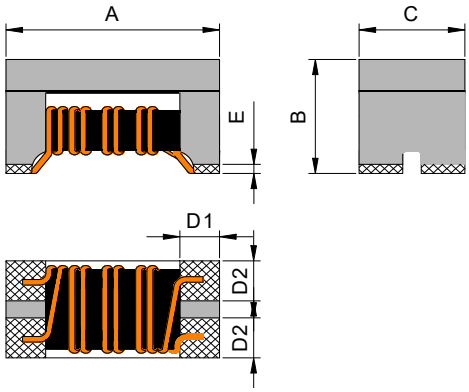
ACMC	2012	S	-	900	-	2P	-	T
A		B		C	D	E		F

A: Automobile Type　　B: External Dimensions 外形尺寸 A*C

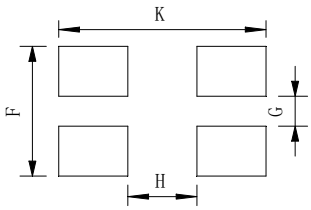
C: For genenal singal line　　D: Impedance (900 = 90Ω)

E: Number of line 2P : 2-Line　　F: Packaging : T=Taping and reel

● SHAPES AND DIMENSIONS 外形尺寸 (Unit:mm)

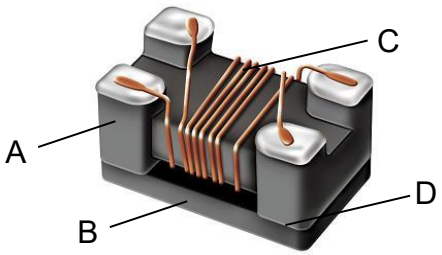


Recommended Land Pattern



TYPE(型号)	A	B	C	D1	D2	E	F	G	H	K
ACMC2012S	2.0±0.2	1.2±0.2	1.2±0.2	0.5 Ref	0.45 Ref	0.17 Max	1.2 Ref	0.4 Ref	0.8 Ref	2.6 Ref
ACMC3216S	3.2±0.2	2.0±0.2	1.6±0.2	0.7 Ref	0.6 Ref	0.22 Max	1.6 Ref	0.4 Ref	1.6 Ref	3.7 Ref
ACMC3225S/H	3.2±0.2	2.5Max	2.5±0.2	0.8 Ref	0.8Ref	0.25Max	3.5Ref	0.6Ref	1.6 Ref	4.1Ref
ACML4532S	4.5±0.2	2.6±0.2	3.2±0.2	1.0 Ref	1.0Ref	0.5 Max	3.4Ref	1.6 Ref	2.9 Ref	5.5 Ref

● STRUCTURE AND MATERIAL



Part	Components	Material
A	Core	Ferrite
B	I Core	Ferrite
C	Wire	Polyurethane enameled copper wire
D	Epoxy	Epoxy resin

● ELECTRICAL CHARACTERISTICS

1. Operating temperature range : -55℃～150℃(Including self - temperature rise)
2. Storage temperature range (packaging conditions): -10℃~+40℃ and RH 70% (Max.)

● TEST AND MEASUREMENT PROCEDURES

1. Inductance(uH)

Test equipment: Keysight E4991B / Agilent 4787A or equivalent

2. DC Resistance (DCR)

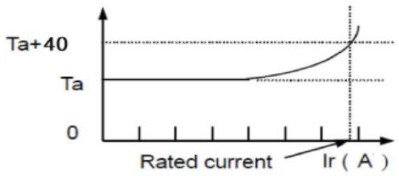
Test equipment: Agilent34420A / Agilent 4338B or equivalent

3. Rated Current (Irms)

Irms is direct electric current as chip surface temperature rose just 20 or 40 against chip initial surface temperature (Ta)

Temperature rise: Rated Current < 1A ΔT 20℃ Max

Rated Current ≥ 1A ΔT 40℃ Max



4. Insulation Resistance

Test equipment: Chroma or equivalent TH2683A / ZX6583

● RECOMMENDED SOLDERING TECHNOLOGIES

Re-flowing Profile

Preheat condition: 150~200 /60~120sec.

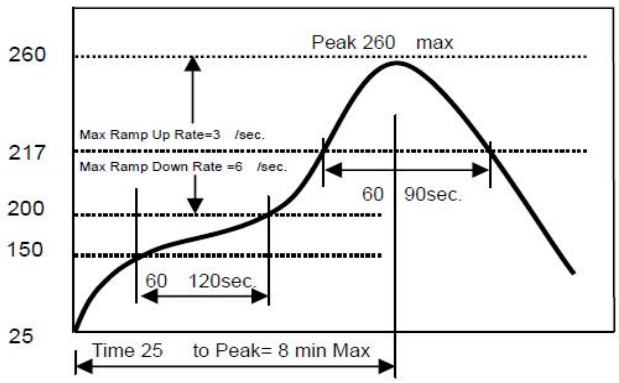
Allowed time above 217C: 60~90sec.

Max temp: 260

Max time at max temp: 10sec

Solder paste: Sn/3.0Ag/0.5Cu

Allowed Reflow time: 2 times max



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● **SPECIFICATION TABLE:**

ACMC2012S Series

Part No.	Common Mode Impedance(Ω)	Test Frequency (MHz)	DCR (Ω) Max	Max. Rated Current (mA)	Rated Voltage (Vdc)	Insulation Resistance (MΩ) Min.	Withstanding Voltage (Vdc)
ACMC2012S-670-2P-T	67±25%	100	0.25	400	50	10	125
ACMC2012S-900-2P-T	90±25%	100	0.30	400	50	10	125
ACMC2012S-121-2P-T	120±25%	100	0.30	400	50	10	125
ACMC2012S-181-2P-T	180±25%	100	0.35	350	50	10	125
ACMC2012S-201-2P-T	200±25%	100	0.35	300	50	10	125
ACMC2012S-361-2P-T	360±25%	100	0.40	300	50	10	125

ACMC3216S Series

Part No.	Common Mode Impedance(Ω)	Test Frequency (MHz)	DCR (Ω) Max	Max. Rated Current (mA)	Rated Voltage (Vdc)	Insulation Resistance (MΩ) Min.	Withstanding Voltage (Vdc)
ACMC3216S-900-2P-T	90±25%	100	0.3	400	50	10	125
ACMC3216S-121-2P-T	120±25%	100	0.3	350	50	10	125
ACMC3216S-161-2P-T	160±25%	100	0.4	350	50	10	125
ACMC3216S-221-2P-T	220±25%	100	0.4	300	50	10	125
ACMC3216S-261-2P-T	260±25%	100	0.5	300	50	10	125
ACMC3216S-361-2P-T	360±25%	100	0.6	300	50	10	125
ACMC3216S-601-2P-T	600±25%	100	0.8	300	50	10	125
ACMC3216S-102-2P-T	1000±25%	100	1.0	230	50	10	125
ACMC3216S-222-2P-T	2200±25%	100	1.2	200	50	10	125

ACMC3225S Series

Part No.	Common Mode Impedance(Ω)	Test Frequency (MHz)	DCR (Ω) Max	Max. Rated Current (mA)	Rated Voltage (Vdc)	Insulation Resistance (MΩ) Min.	Withstanding Voltage (Vdc)
ACMC3225S-900-2P-T	90±25%	100	0.05	1000	50	10	125
ACMC3225S-601-2P-T	600±25%	100	0.2	1000	50	10	125
ACMC3225S-102-2P-T	1000±25%	100	0.3	750	50	10	125
ACMC3225S-222-2P-T	2200±25%	100	0.3	640	50	10	125
ACMC3225S-242-2P-T	2400±25%	100	0.4	1000	50	10	125

ACMC3225H Series

Part No.	Common Mode Impedance(Ω)	Test Frequency (MHz)	DCR (Ω) Max	Max. Rated Current (mA)	Rated Voltage (Vdc)	Insulation Resistance (MΩ) Min.	Withstanding Voltage (Vdc)
ACMC3225H-501-2P-T	500±25%	100	0.1	2000	50	10	125
ACMC3225H-102-2P-T	1000±25%	100	0.1	1500	50	10	125

ACMC4532S Series

Part No.	Common Mode Impedance(Ω)	Test Frequency (MHz)	DCR (Ω) Max	Max. Rated Current (mA)	Rated Voltage (Vdc)	Insulation Resistance (MΩ) Min.	Withstanding Voltage (Vdc)
ACMC4532S-701-2P-T	700±25%	100	0.15	1000	50	10	125

1. Operating temperature range : -55℃～150℃(Including self - temperature rise)
2. Storage temperature range (packaging conditions): -10℃~+40℃ and RH 70% (Max.)
3. Rated Current (Irms)
   Irms is direct electric current as chip surface temperature rose just 20℃ or 40℃ against chip initial surface temperature (Ta)

Temperature rise: Rated Current < 1A ΔT 20℃ Max
Rated Current ≥ 1A ΔT 40℃ Max

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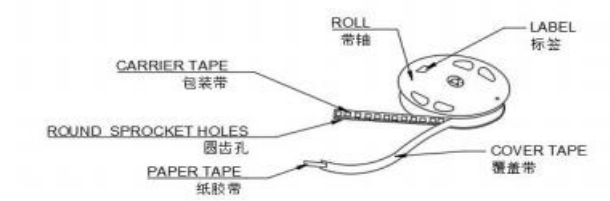
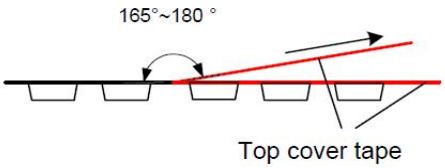
● PACKAGING SPECIFICATION :

1. Packaging - Cover Tape

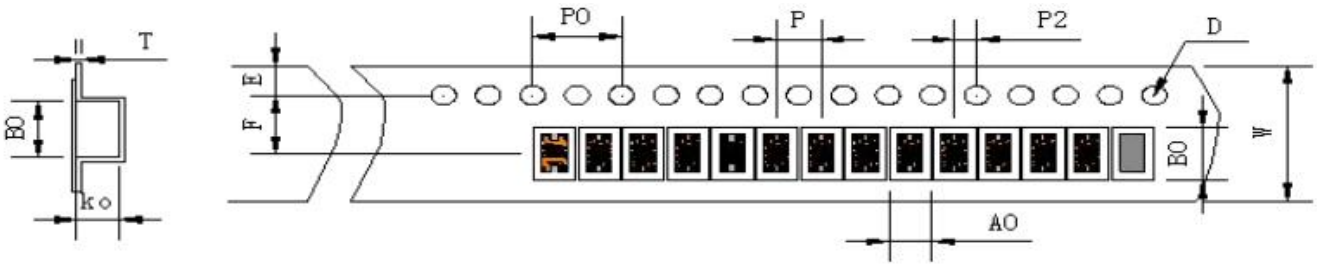
The force for tearing off cover tape is 10 to 100 grams in the arrow direction.



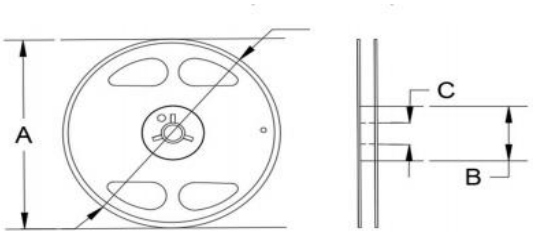


Peel-off speed: 300mm/min.

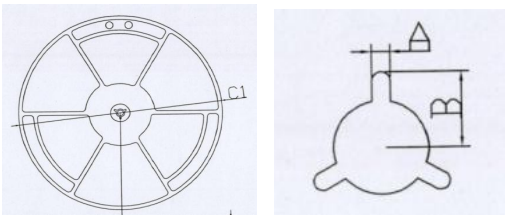
2. Packaging - Tape & Reel



ACMC2012S/ACMC3216S/ACMC4532S:



ACMC3225S/H:



Type	Tape Dimension (mm)						Reel Dimension (mm)			Quantity (Pcs/Reel)
	W	A0	B0	K0	D	P	A	B	C(C1)	
ACMC2012S	8	1.55	2.45	1.5	1.5	4	178	60	13	2000 pcs
ACMC3216S	8	1.95	3.7	2.4	1.5	4	178	60	13	2000 pcs
ACMC3225S/H	12	2.9	3.5	2.7	1.5	8	2.3	10.75	330	3000 pcs
ACML4532S	12	3.7	4.95	2.95	1.5	8	178	60	13	500pcs

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MODIFY RECORD

Version	Date	Content	Prepared	Approved
A0	2022/5/27	New release	张姝娟	王其艮
A1	2023/3/10	Change of packing specification	徐子健	张姝娟