

Automotive Signal Common Mode Chokes



ACMS-Q4528

Request Samples



Check Inventory



4.5 x 3.2 x 2.8 mm
RoHS/RoHS II Compliant
MSL Level = 1

Features

- AEC-Q200 compliant
- PPAP ready and supported
- Manufactured in TS/IATF 16949 production lines
- Excellent impedance characteristics
- Inductance values from 11 μ H to 100 μ H

Applications

- Differential signal line common mode noise suppression.
- Multimedia devices
- Automotive applications such as ADAS, Infotainment, Sensing, TCU

Electrical Specifications

Part Number	Impedance (Ω) @10MHz		Inductance (μ H) (+50/-30%)	DCR (m Ω)	Rated Current (A)	Rated Voltage (Vdc)	Insulation Resistance (M Ω)
	Min	Typ.		Max	Max	Max	Min
ACMS-Q4528-110	300	600	11	600	0.36	50	10
ACMS-Q4528-220	500	1200	22	1000	0.31	50	10
ACMS-Q4528-510	1000	2800	51	1000	0.23	50	10
ACMS-Q4528-101	2000	5800	100	2000	0.20	50	10

Rated Current is based on an Irms temperature rise of 40°C

Inductance Test Conditions: 0.1V, 100KHz

ACMS-Q4528 is AEC-Q200 Automotive certified

ACMS-Q4528 Series is **RoHS Compliant and Pb free**

Operating Temperature: -55°C to +150°C (Including self-heating)

Storage Temperature (on PCB): -55°C to +150°C

Storage (in original packaging): <40°C, <60% RH



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3/31/2022

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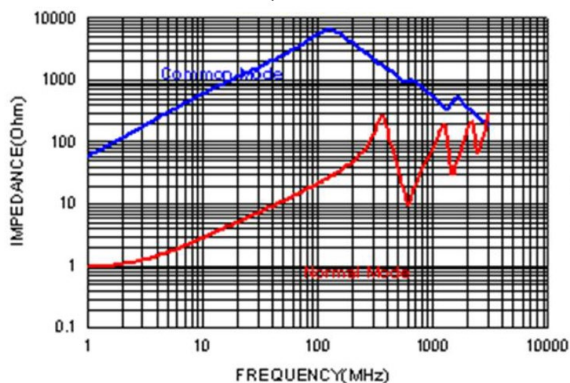
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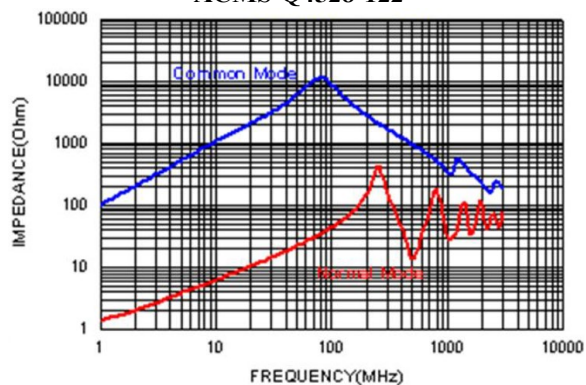
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Electrical Specifications

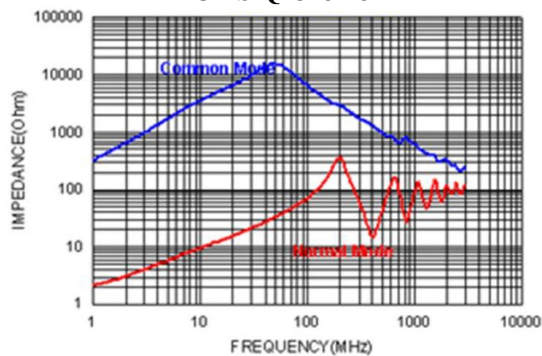
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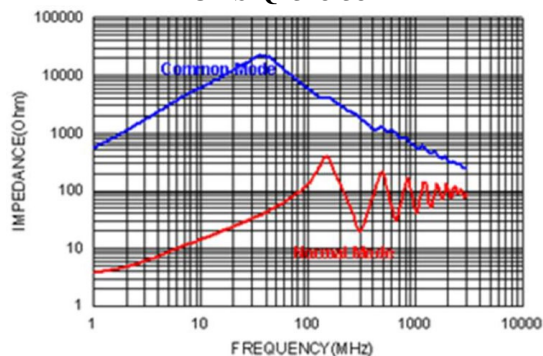
ACMS-Q4528-122



ACMS-Q4528-282



ACMS-Q4528-582





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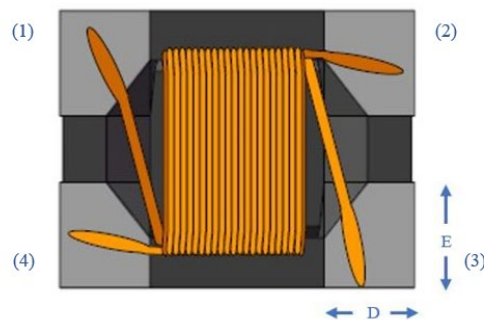
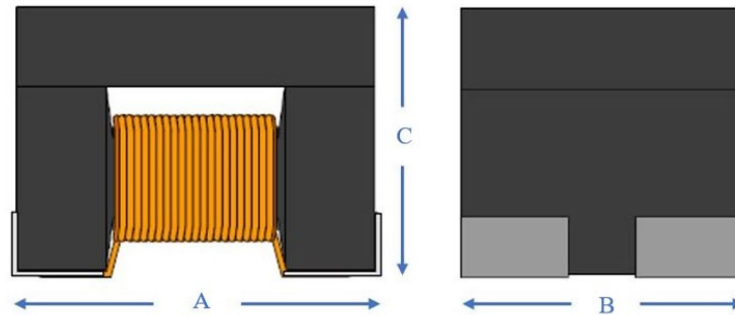


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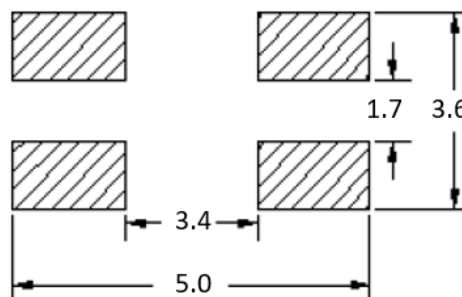


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Mechanical Specifications



A	B	C	D	E
4.5 ±0.2	3.2 ±0.2	2.8 ±0.2	0.75 ±0.2	0.85 ±0.2



Recommended Layout

Dimensions: mm



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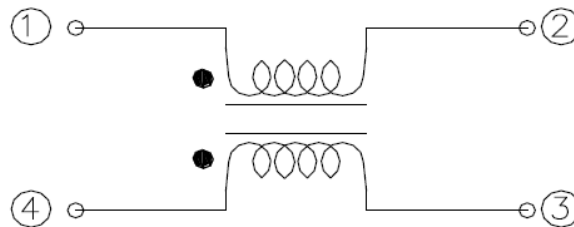


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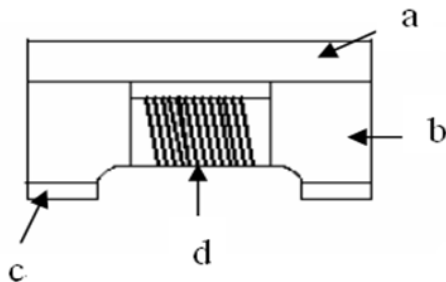


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Schematic

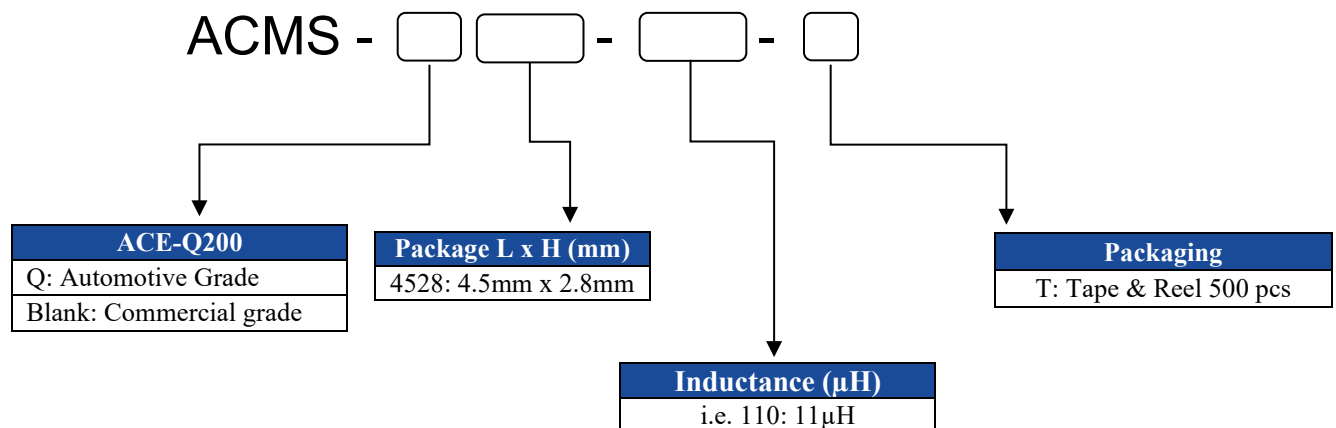


Materials



	Description	Specification
a	Upper Plate	Ferrite
b	Core	Ferrite Core
c	Electrode	Ag/Ni/Sn
d	Wire	Enameled Copper Wire

Part Identification



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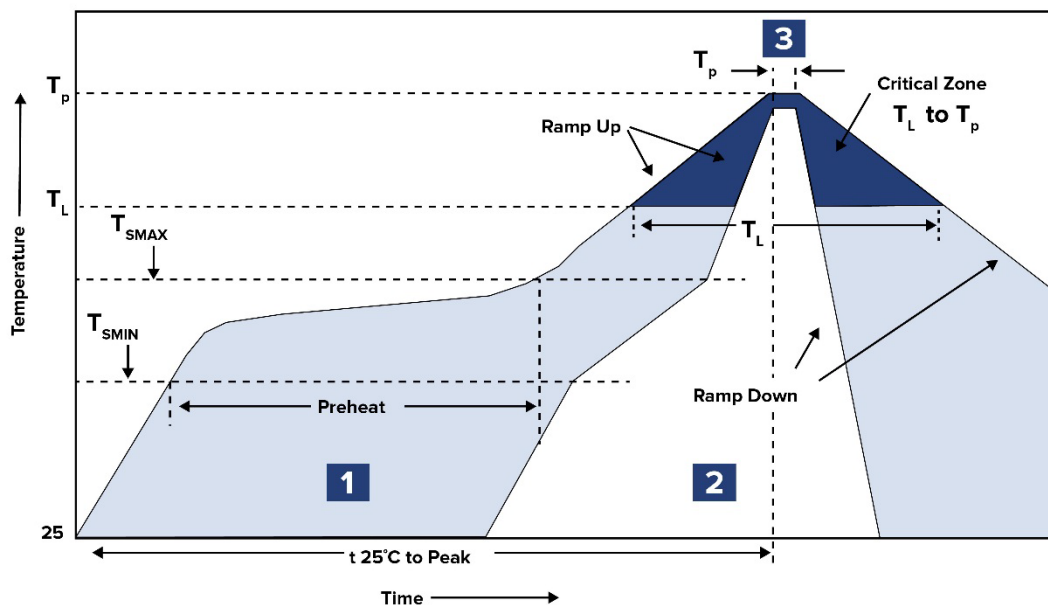


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Reflow Profile



Zone	Description	Temperature	Times
1	Preheat	$T_{SMIN} \sim T_{SMAX}$ 150°C ~ 200°C	60 ~ 180 sec.
2	Reflow	T_L 217°C	60 ~ 150 sec.
3	Peak heat	T_p 250°C ±5°C	30 sec. MAX

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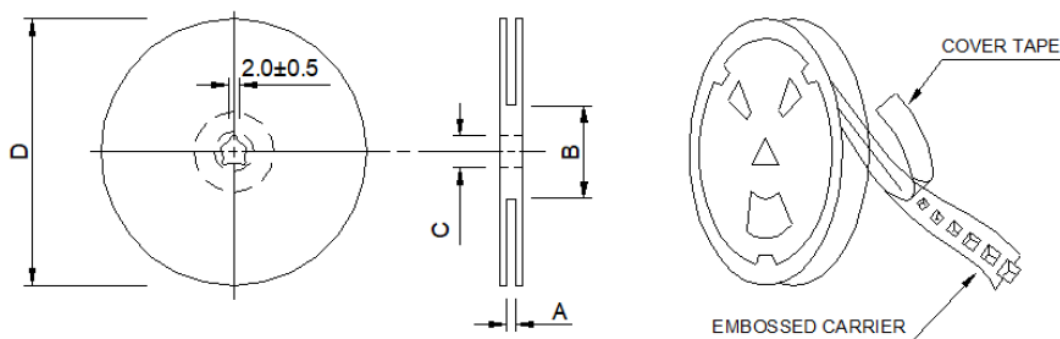
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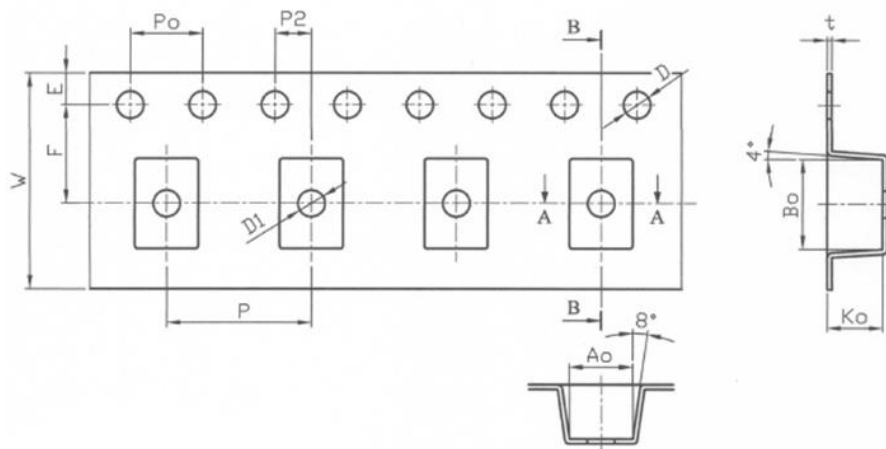
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Packaging

Tape & Reel: 500pcs/reel



Series	A	B	C	D
ACMS-Q4528	13.5 ±0.5	60.0 ±2.0	13.5 ±0.5	178 ±2.0



W	P	E	F	P0	P2	B0	A0	K0	D	D1	t
12.0 ±0.10	8.0 ±0.10	1.75 ±0.10	5.5 ±0.10	4.0 ±0.10	2.0 ±0.10	4.9 ±0.10	3.6 ±0.10	3.0 ±0.10	1.5 +0.10/-0	1.5 ±0.10	0.26 ±0.05

Dimensions: mm

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