



# Automotive Signal Common Mode Chokes

**ACMS-Q3225E**

Request Samples



Check Inventory



3.2 x 2.5 x 2.2 mm  
RoHS/RoHS II Compliant  
MSL Level = 1

## Features

- AEC-Q200 compliant, Grade 1
- PPAP ready and supported
- Manufactured in TS/IATF 16949 production lines
- Excellent impedance characteristics

## Applications

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

## Electrical Specifications

Part Number	Inductance ( $\mu$ H) (+50%/-30%)	DCR (m $\Omega$ )	Rated Current (A)	Rated Voltage (Vdc)	Insulation Resistance (M $\Omega$ )
		Max	Max	Max	Min
ACMS-Q3225E-101	100	1500	0.15	80	10
ACMS-Q3225E-201	200	4000	0.07	80	10

**Rated Current is based on an Irms temperature rise of 20°C**

**Inductance Test Conditions: 0.1MHz/0.1V**

**ACMS-Q3225E is AEC-Q200 Automotive certified**

**ACMS-Q3225E Series is RoHS Compliant and Pb free**

**Operating Temperature: -40°C to +125°C (Including self-heating)**

**Storage Temperature (on PCB): -40°C to +125°C**

**Storage (in original packaging): <40°C, <70% RH**



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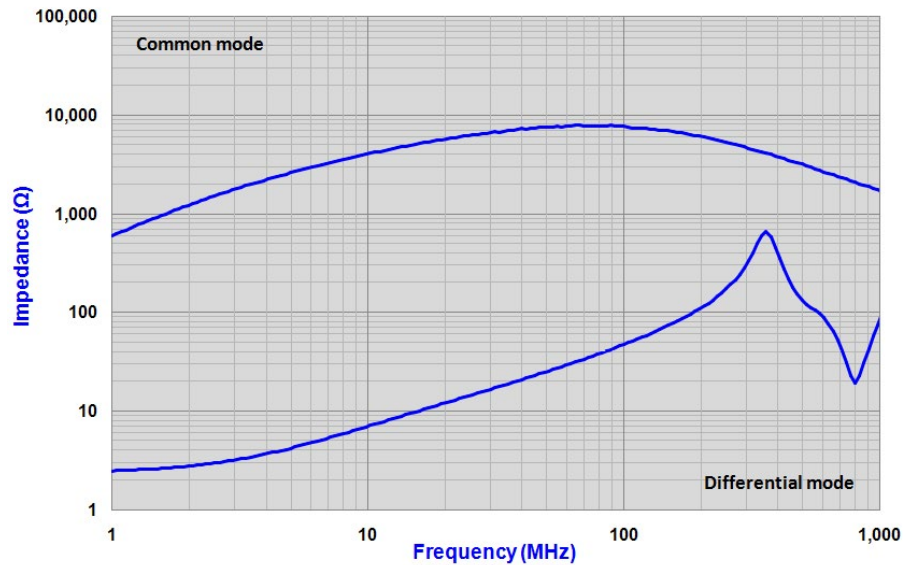
Check Inventory



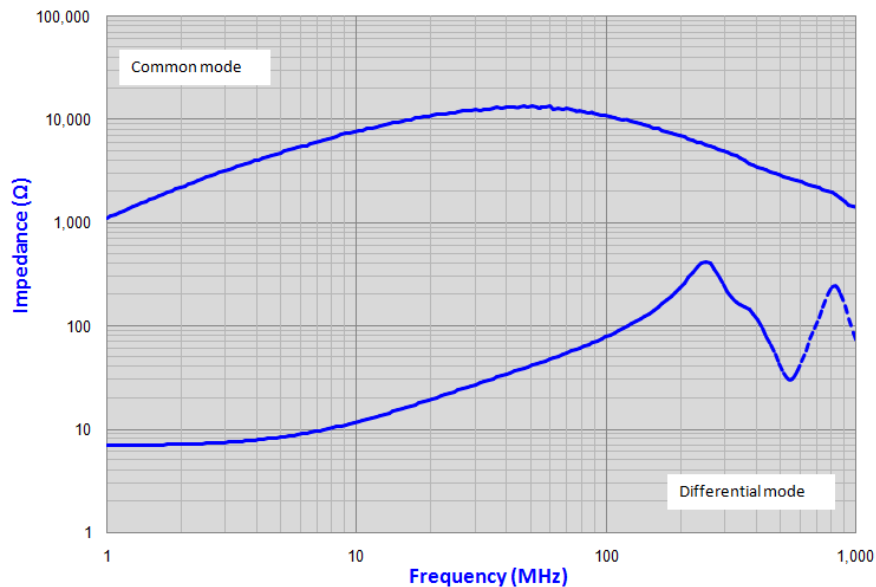
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## Electrical Specifications

### ACMS-Q3225E-101



### ACMS-Q3225E-201



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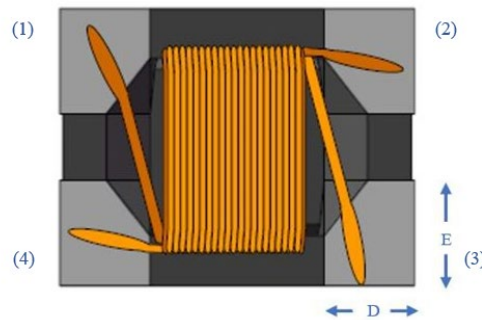
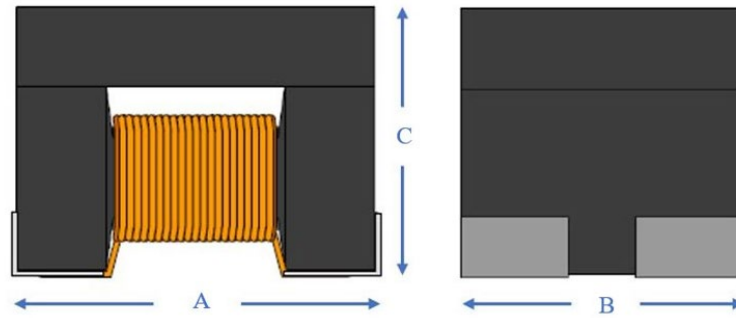
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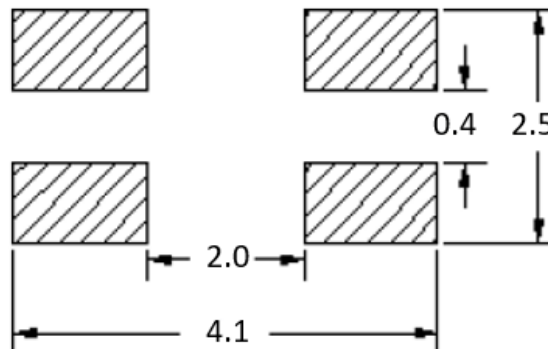
Check Inventory

3.2 x 2.5 x 2.2 mm  
**RoHS/RoHS II Compliant**  
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## Mechanical Specifications



A	B	C	D	E
3.2 ±0.2	2.5 ±0.2	2.2 ±0.2	0.7 Typ.	1.05 Typ.



## Recommended Layout

Dimensions: mm



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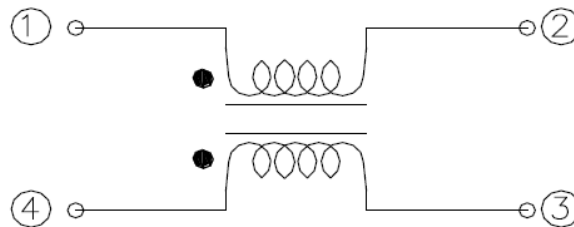


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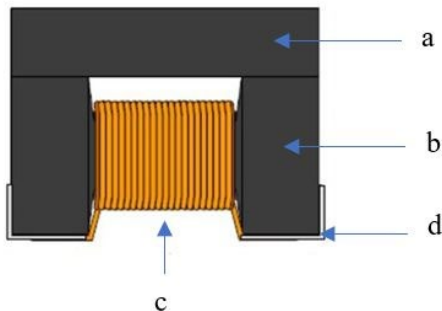


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## Schematic

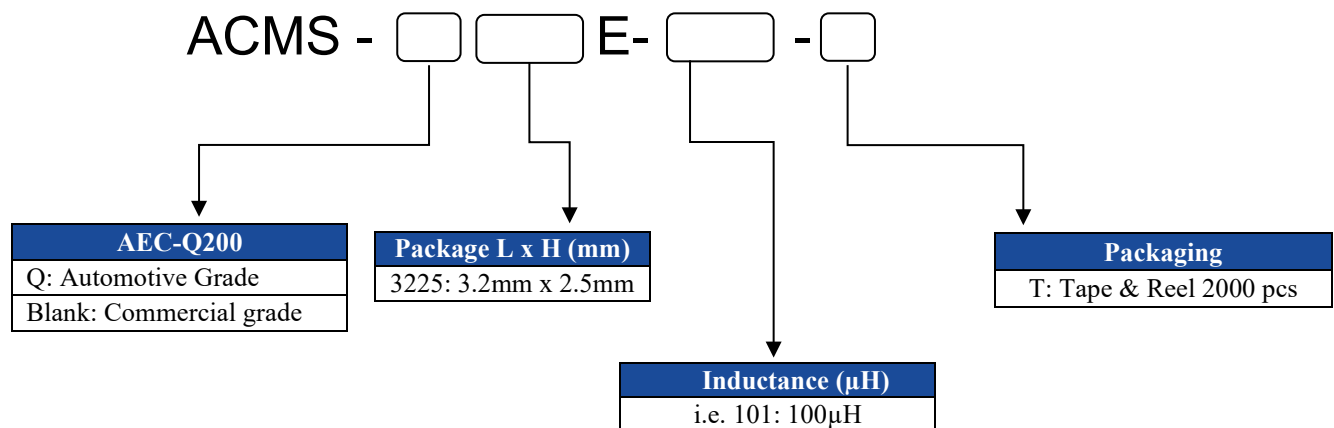


## Materials



	Description	Specification
a	Upper Plate	Ni-Zn Ferrite
b	Core	Ni-Zn Ferrite
c	Wire	Enameled copper wire
d	Electrode	Ag/Ni/Sn

## Part Identification



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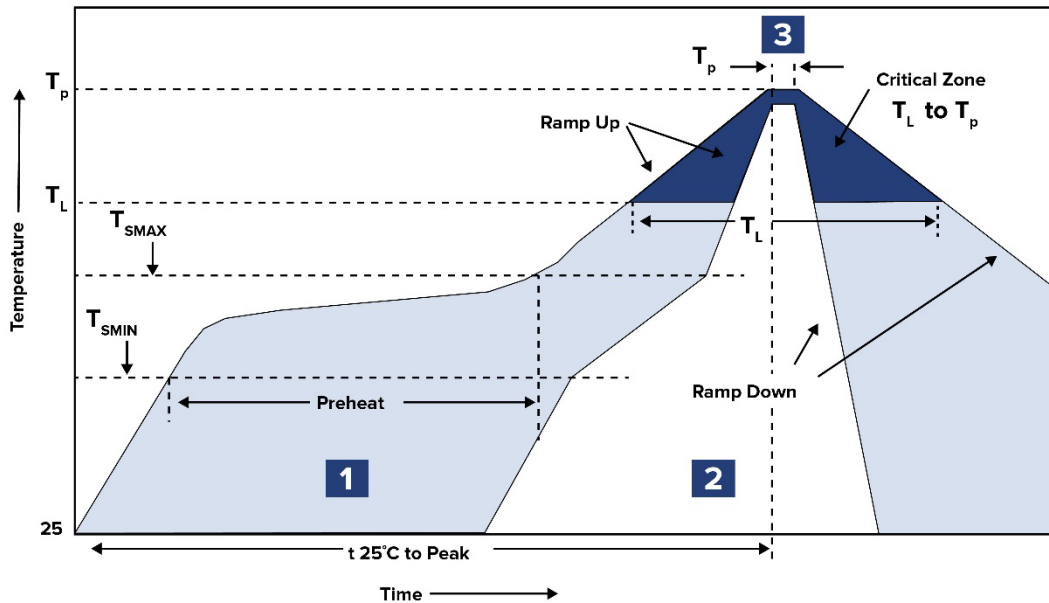


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## Reflow Profile



Zone	Description	Temperature	Times
1	Preheat	$T_{SMIN} \sim T_{SMAX}$ 150°C ~ 200°C	60 ~ 120 sec.
2	Reflow	$T_L$ 220°C	60 ~ 90 sec.
3	Peak heat	$T_P$ 260°C	10 sec. MAX



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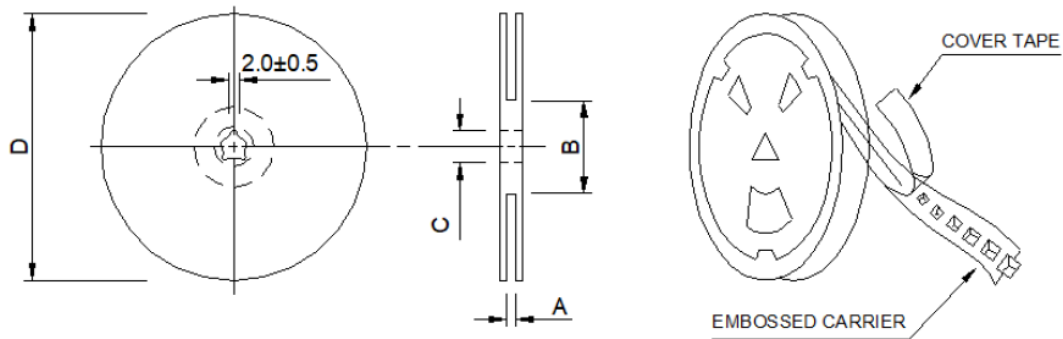
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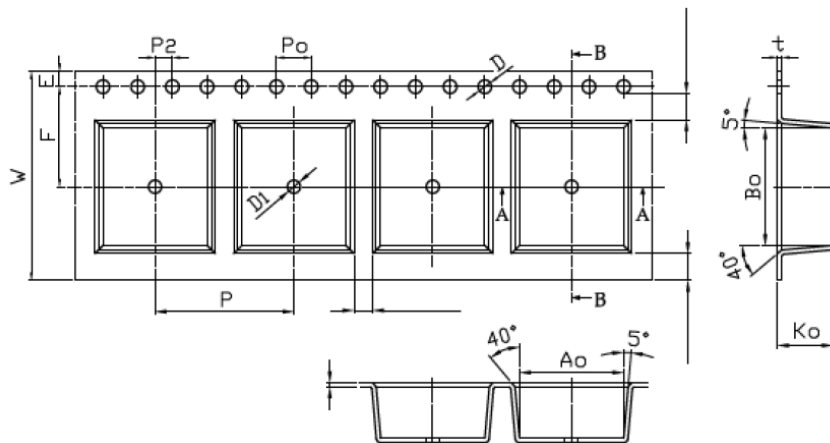
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## Packaging

**Tape & Reel: 2000pcs/reel**



Series	A	B	C	D
ACMS-Q3225	$13.0 \pm 0.5$	$100.0 \pm 2.0$	$13.0 \pm 0.5$	330



W	P	E	F	P0	P2	Bo	Ao	Ko	D	t
12.0	8.0	1.75	5.55	4.0	2.0	3.6	2.9	2.6	1.55	0.3
$\pm 0.10$	$\pm 0.10$	$\pm 0.10$	$\pm 0.10$	$\pm 0.10$	$\pm 0.10$	$\pm 0.10$	$\pm 0.10$	$\pm 0.10$	$+0.10/-0$	$\pm 0.05$

Dimensions: mm

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