



# Automotive signal Common Mode Chokes

ACMS-Q3225

Request Samples



Check Inventory



3.2 x 2.5 x 2.5 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  $\mu$ H to 100  $\mu$ H

## Applications

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

## Electrical Specifications

Part Number	Impedance ( $\Omega$ ) @10MHz		Inductance ( $\mu$ H) (+50/-30%)	DCR (m $\Omega$ )	Rated Current (A)	Rated Voltage (Vdc)	Insulation Resistance (M $\Omega$ )
	Min	Typ.		Max	Max	Max	Min
ACMS-Q3225-110	300	550	11	400	0.3	80	10
ACMS-Q3225-220	500	1100	22	500	0.25	80	10
ACMS-Q3225-510	1000	2600	51	700	0.2	80	10
ACMS-Q3225-101	2200	5100	100	1500	0.15	80	10

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

**Inductance Test Conditions: 0.1V/100KHz**

**ACMS-Q3225 is AEC-Q200 Automotive certified**

**ACMS-Q3225 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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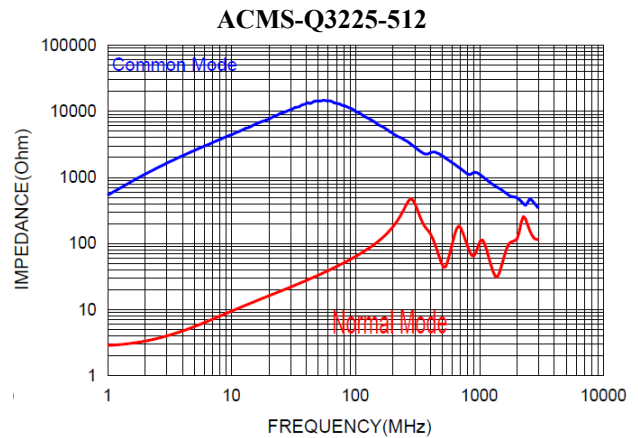
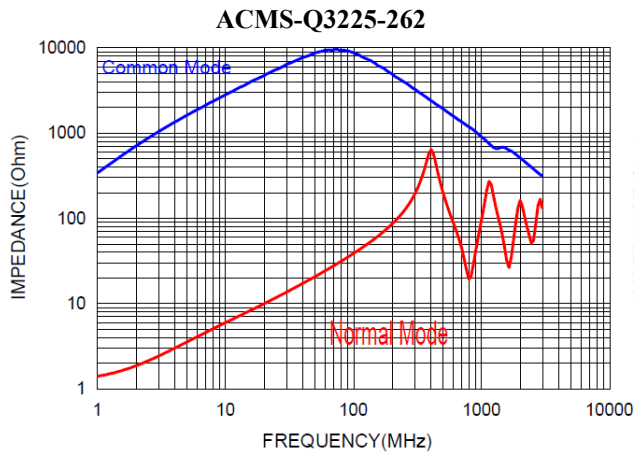
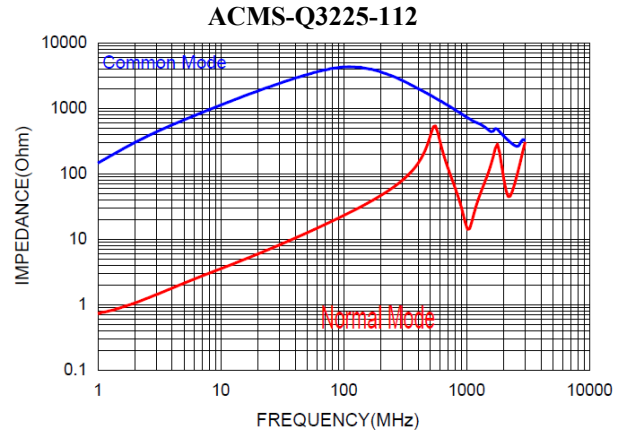
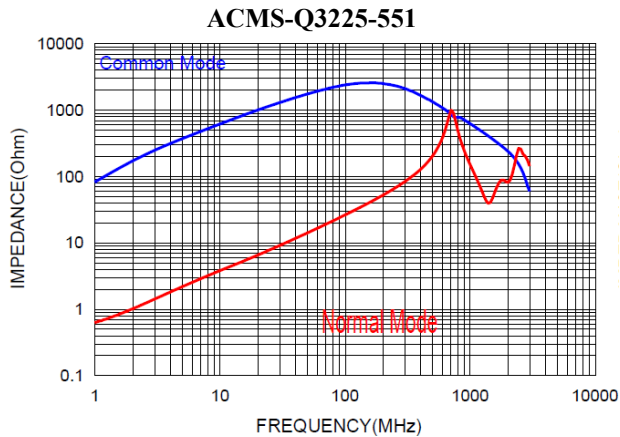


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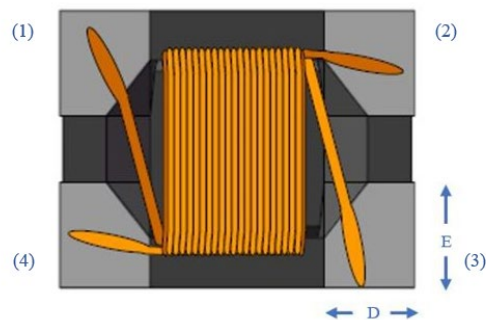
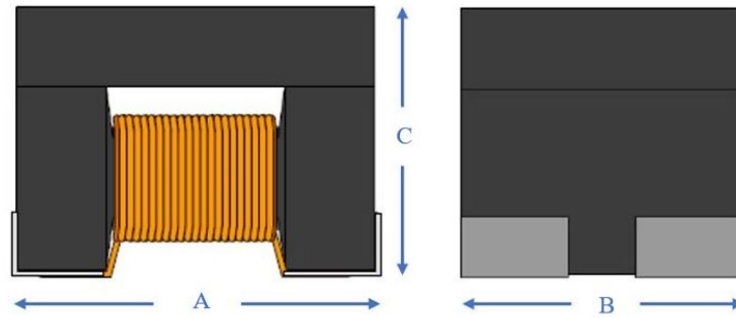


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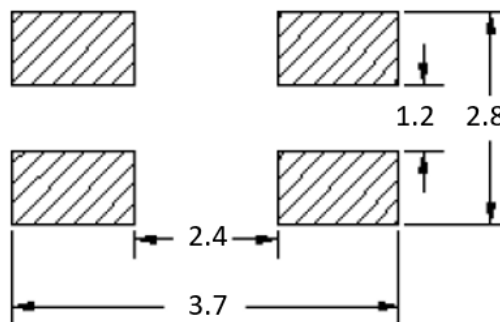


3.2 x 2.5 x 2.5 mm  
**RoHS/RoHS II Compliant**  
 MSL Level = 1

## Mechanical Specifications



A	B	C	D	E
3.20 ±0.3	2.5 ±0.2	2.5 Max	0.55 ±0.15	0.75 ±0.2



## Recommended Layout

Dimensions: mm



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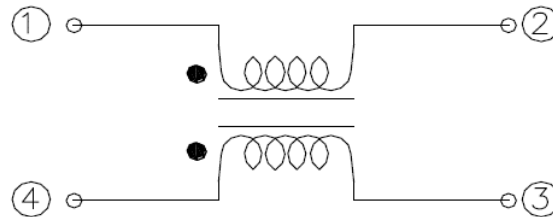


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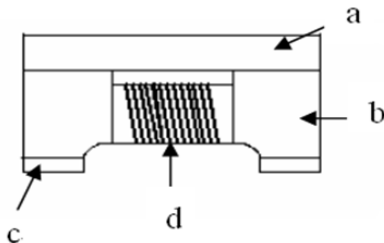


3.2 x 2.5 x 2.5 mm  
**RoHS/RoHS II Compliant**  
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## Schematic

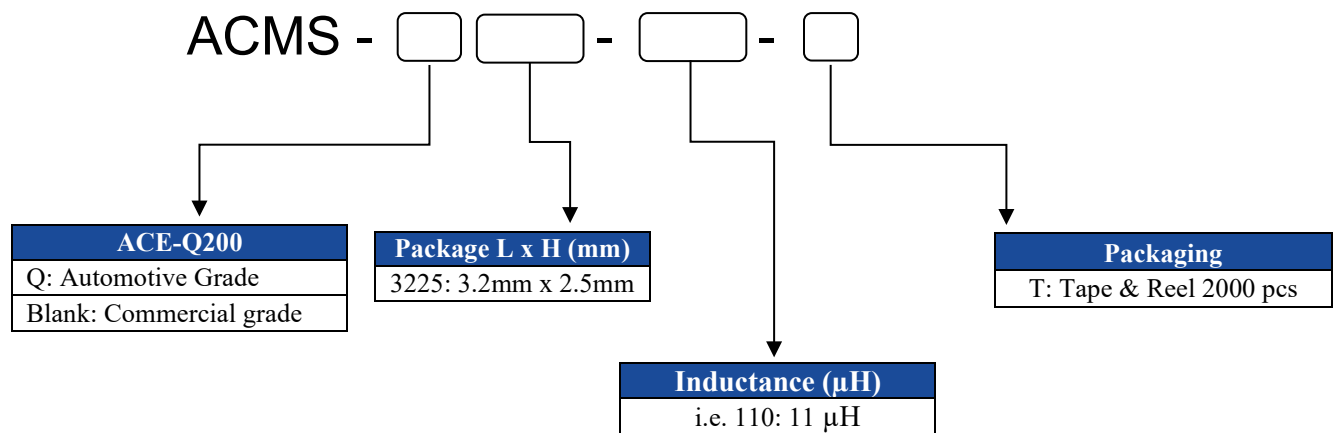


## Materials



	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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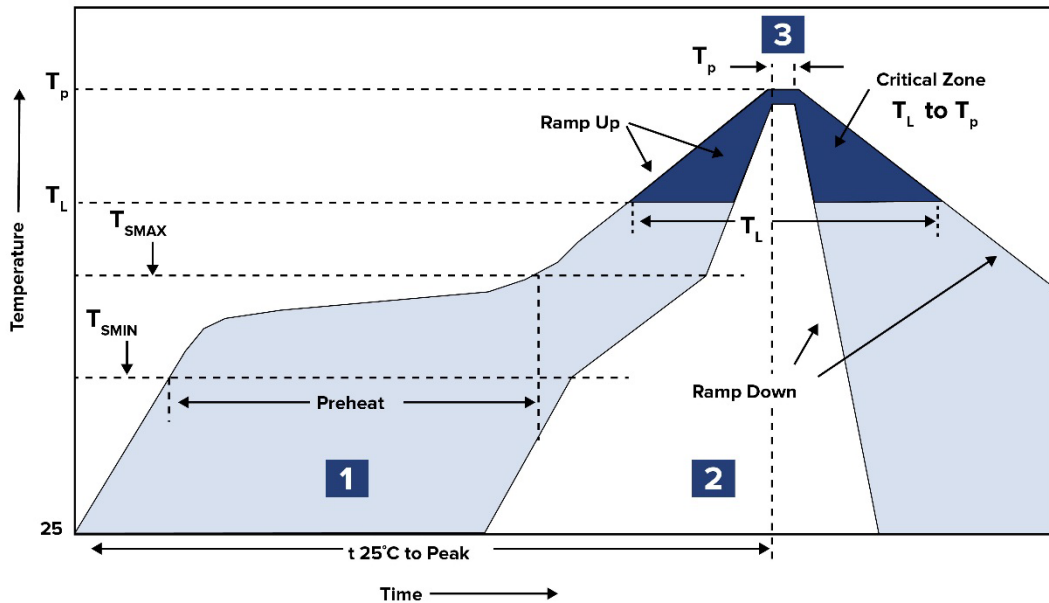


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## Reflow Profile



Zone	Description	Temperature	Times
1	Preheat	$T_{SMIN} \sim T_{SMAX}$ 150°C ~ 200°C	60 ~ 120 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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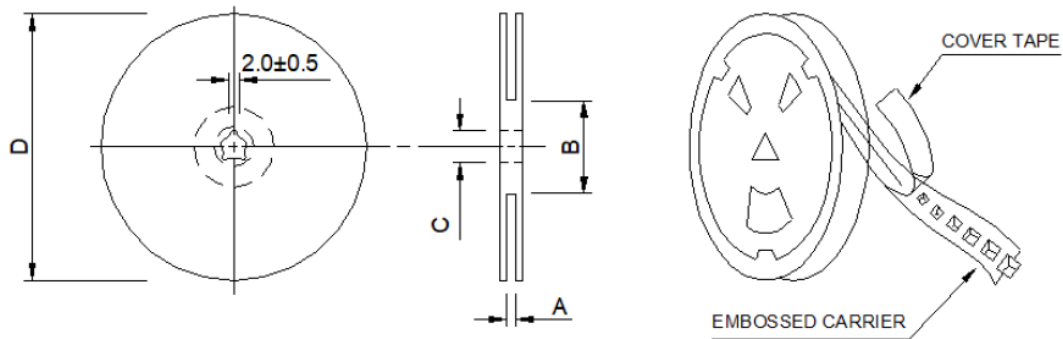
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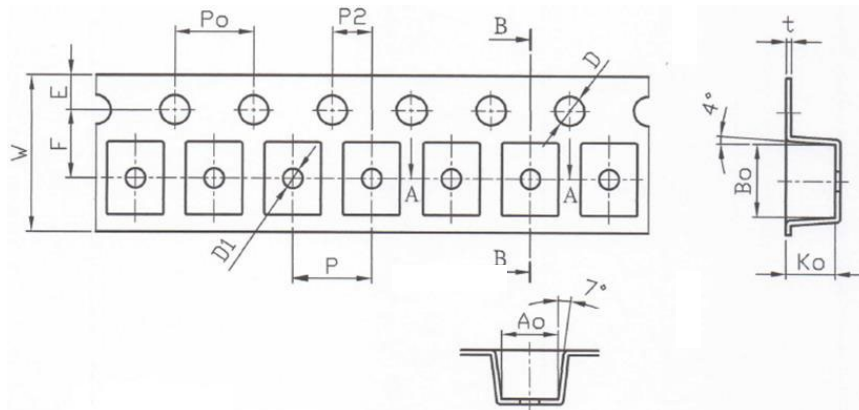
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## Packaging

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



Series	A	B	C	D
ACMS-Q3225	9.0 ± 0.5	60.0 ± 2.0	13.5 ± 0.5	178 ± 2.0



W	P	E	F	P0	P2	B0	Ao	Ko	D	D1	t
8.0	4.0	1.75	3.5	4.0	2.0	3.72	2.88	2.5	1.5	1.00	0.26
±0.10	±0.10	±0.10	±0.10	±0.10	±0.10	±0.10	±0.10	±0.10	+0.10/-0	±0.10	±0.05

Dimensions: mm

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