

# Automotive Signal Common Mode Chokes



ACMS-Q3222F

Request Samples



Check Inventory



3.2 x 2.5 x 2.2mm  
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 CANFD

## Electrical Specifications

Part Number	Inductance ( $\mu\text{H}$ ) (+50%/-30%)	DCR ( $\text{m}\Omega$ )	Rated Current (A)	Rated Voltage (Vdc)	Insulation Resistance ( $\text{M}\Omega$ )
		Max	Max	Max	Min
ACMS-Q3222F-101	100	2500	0.15	50	10

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

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

**ACMS-Q3222F is AEC-Q200 Automotive certified.**

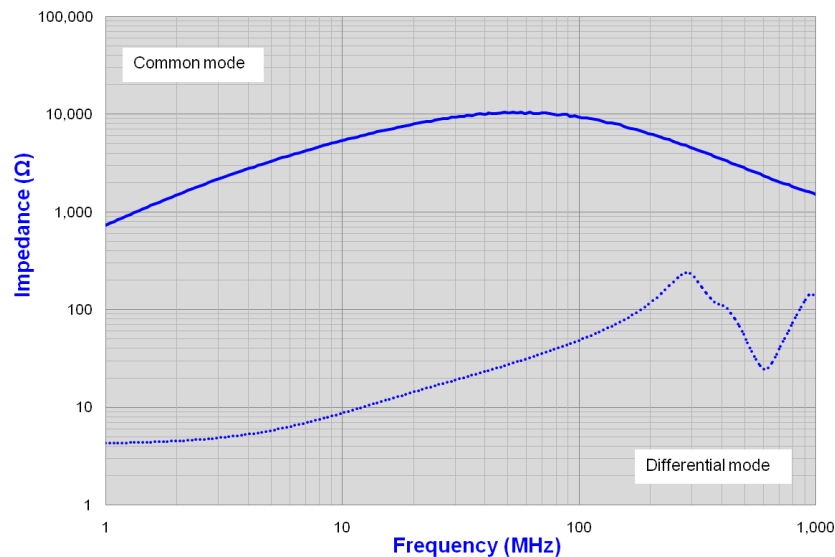
**ACMS-Q3222F Series is RoHS Compliant and Pb free.**

**Operating Temperature:** -40°C to +150°C (Including self-heating)

**Storage Temperature (on PCB):** -40°C to +150°C.

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

## Performance Graph



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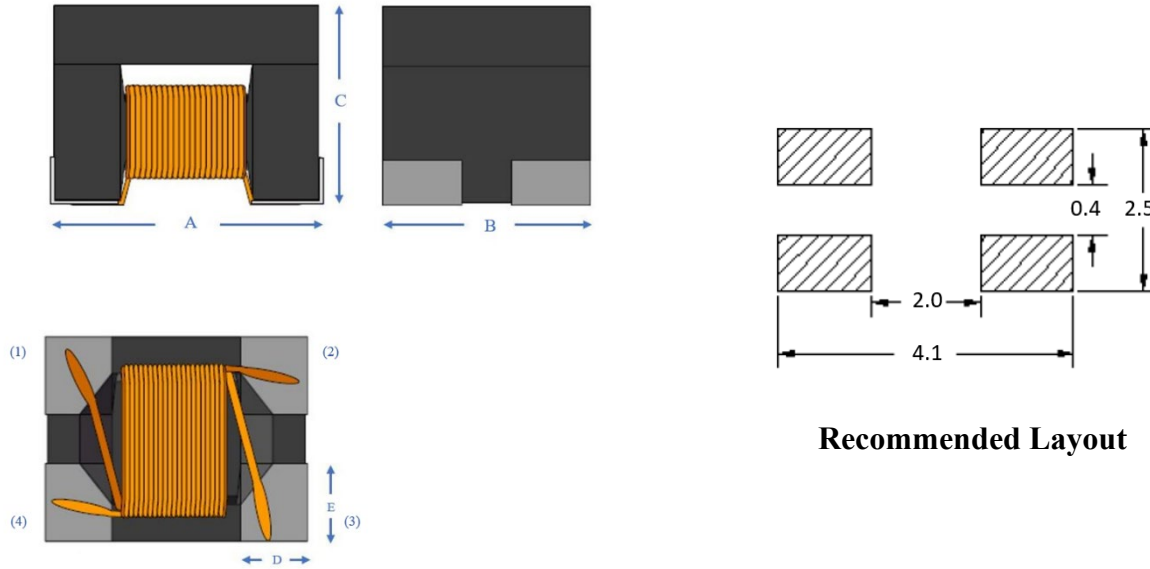


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## Mechanical Specifications

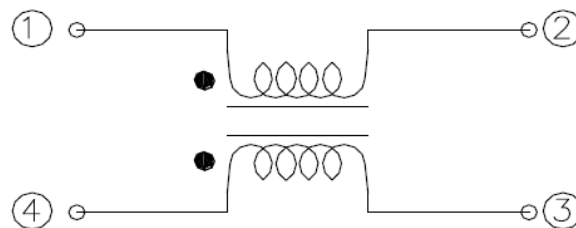


## Recommended Layout

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

Dimensions: mm

## Schematic



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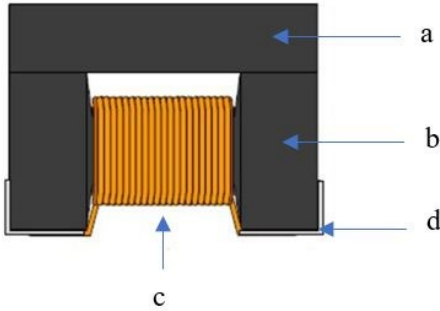


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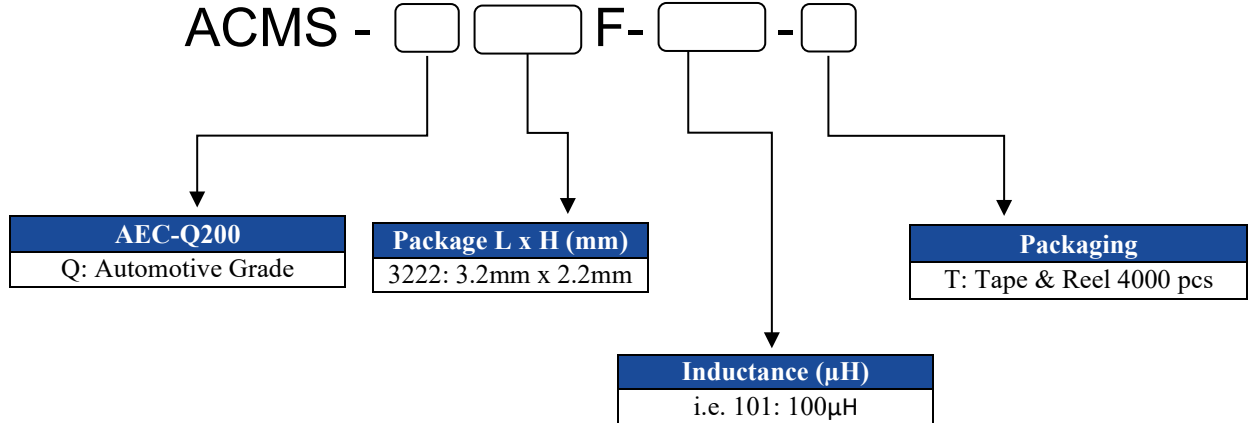
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## Materials



	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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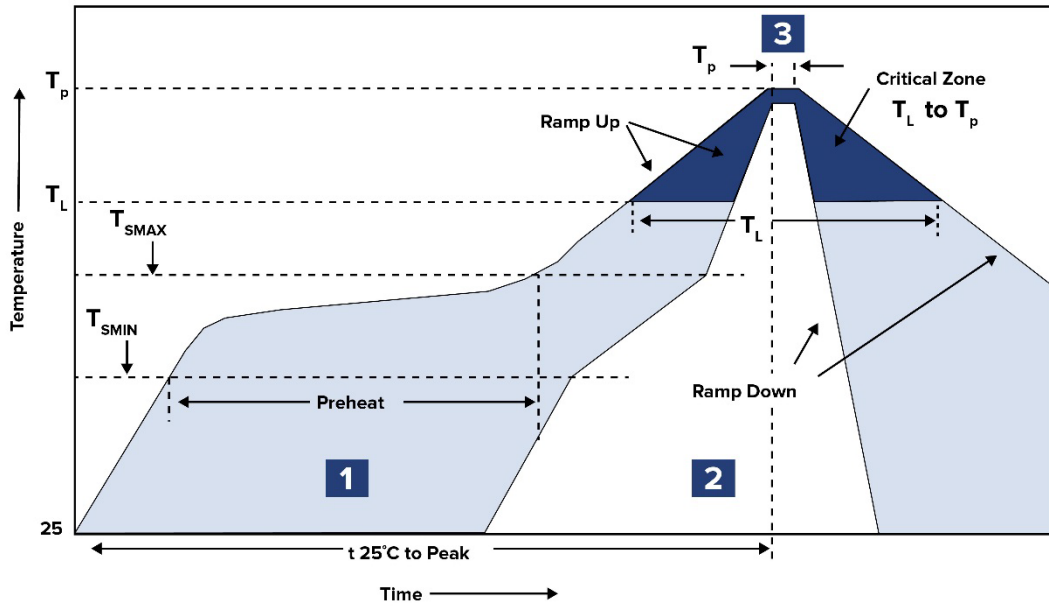


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## Reflow Profile



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 Max	10 sec. MAX

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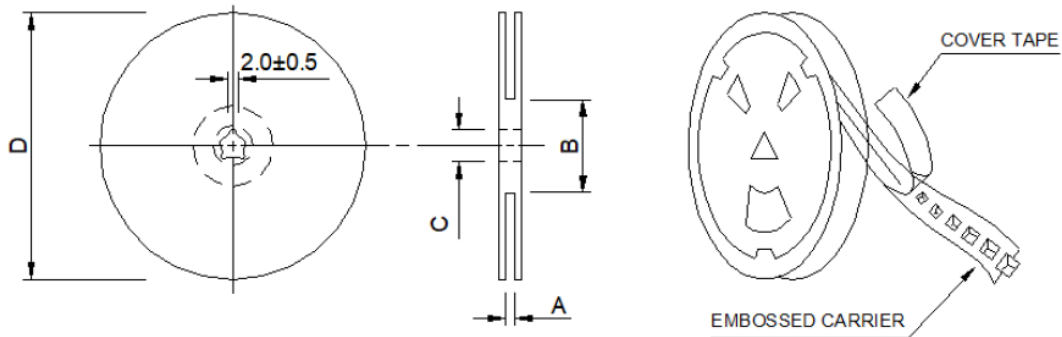
Check Inventory



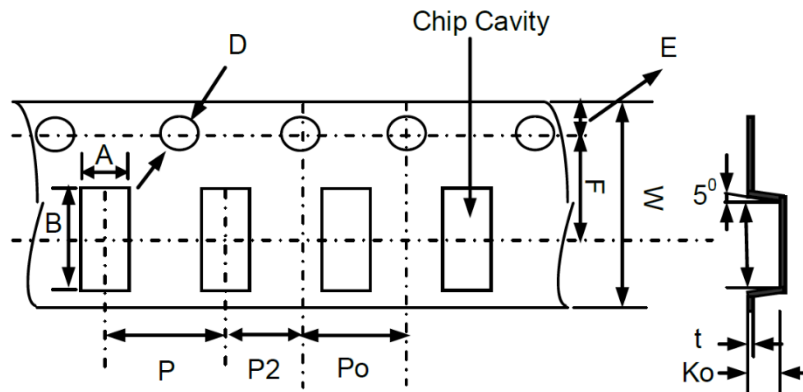
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## Packaging

Tape & Reel: 4000pcs/reel



Series	A	B	C	D
ACMS-Q3222F	12.4 ±0.1	100.0 ±2.0	13.0 ±0.5	330



W	P1	E	F	P0	P2	B	A	Ko	D	t
12.0 ±0.20	4.0 ±0.10	1.75 ±0.10	5.5 ±0.10	4.0 ±0.10	2.0 ±0.10	3.5 ±0.10	2.85 ±0.10	2.85 ±0.10	1.5 +0.10/-0	0.3 ±0.05

## Dimensions: mm

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