Automotive Signal Common Mode Chokes



ACMS-Q3225C

Request Samples | Check Inventory

3.2 x 2.5 x 2.35 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

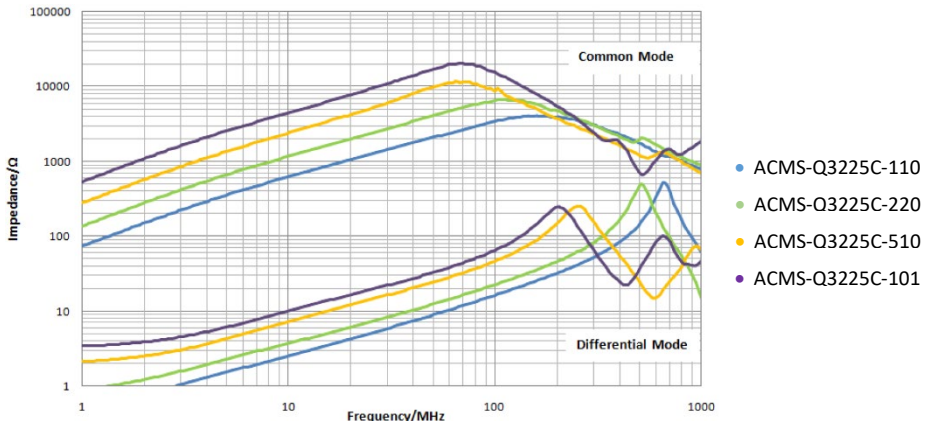
- Differential signal line common mode noise suppression.
- Multimedia devices
- Automotive applications such as ADAS, Infotainment, Sensing, TCU
- Automotive CAN bus

Electrical Specifications

Part Number	Inductance (µH) (+50%/-30%)	Impedance (Ω) @10MHz		DCR (mΩ)	Rated Current (A)	Rated Voltage (Vdc)	Insulation Resistance (MΩ)
		Min	Typ.	Max	Max	Max	Min
ACMS-Q3225C-110	11	400	550	300	0.4	80	10
ACMS-Q3225C-220	22	600	1100	500	0.3	80	10
ACMS-Q3225C-510	51	1500	2500	1500	0.2	80	10
ACMS-Q3225C-101	100	2200	4000	2200	0.15	80	10

Rated Current is based on an Irms temperature rise of 20°C.
Inductance Test Conditions: 100KHz/0.1V
ACMS-Q3225C is AEC-Q200 Automotive certified.
ACMS-Q3225C 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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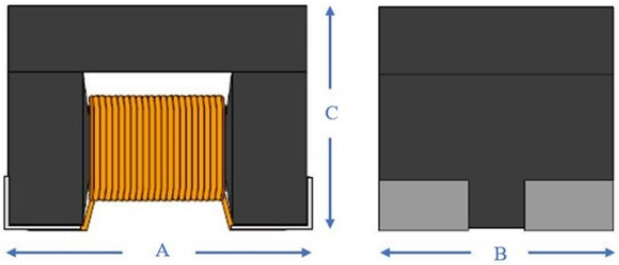


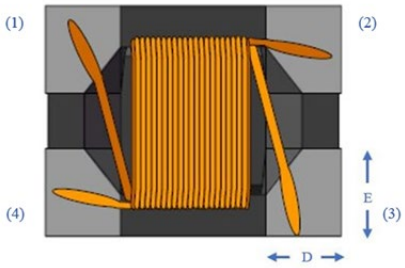
ACMS-Q3225C

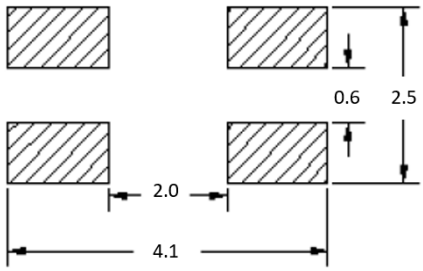
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MSL Level = 1

Mechanical Specifications





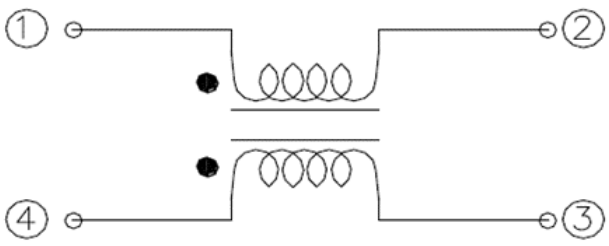


Recommended Layout

A	B	C	D	E
3.2 ±0.2	2.5 ±0.2	2.35 ±0.2	0.80 Max	0.95

Dimensions: mm

Schematic



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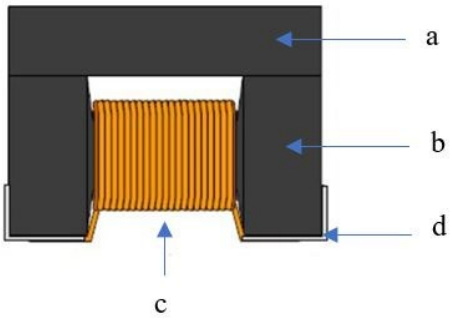


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Materials Specifications



No.	Description	Material
a	Upper Plate	Ni-Zn Ferrite
b	Core	Ni-Zn Ferrite
c	Wire	Enameled copper wire
d	Electrode	Ag/Ni/Sn plating

Part Identification

ACMS - ☐ ☐ C - ☐ - ☐

AEC-Q200
Q: Automotive Grade

Package L x H (mm)
3225: 3.2mm x 2.35mm

Inductance (µH)
i.e. 110: 11µH

Packaging
T: Tape & Reel 2000 pcs

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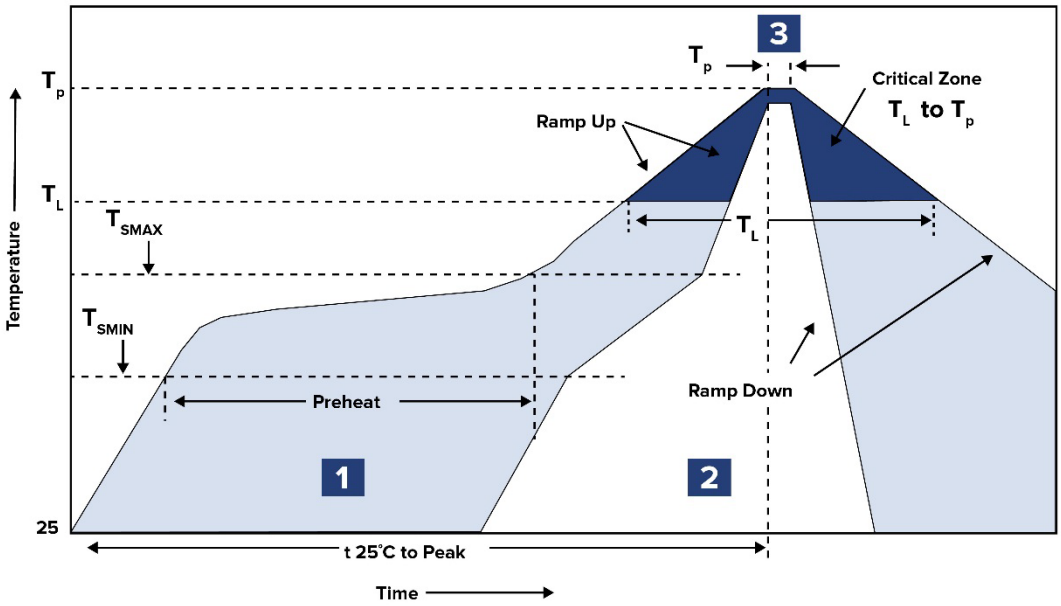


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Reflow Profile



Zone	Description	Temperature	Times
1	Preheat	T_{SMIN} ~ 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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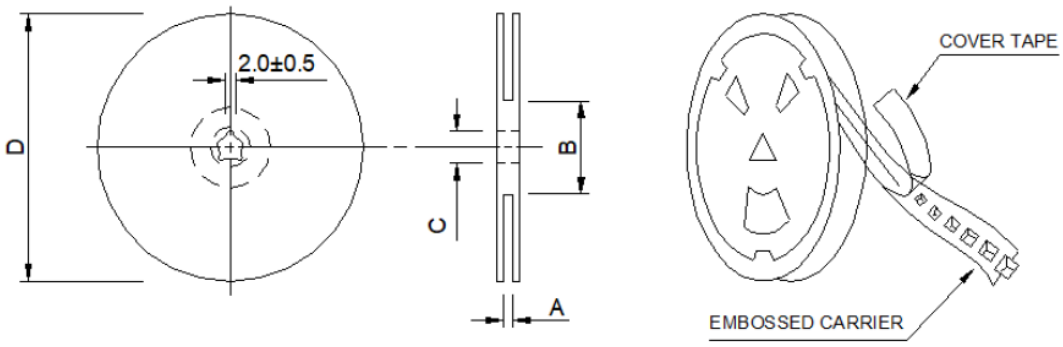
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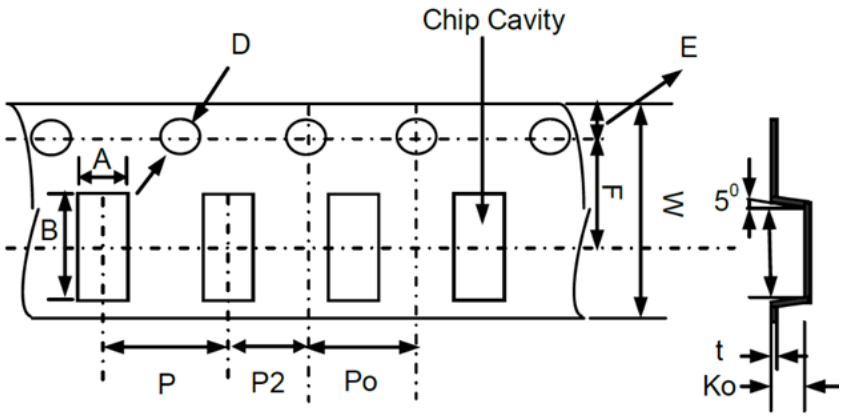
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Packaging

Tape & Reel: 800pcs/reel



Series	A	B	C	D
ACMS-Q3225C	13.0 ±0.5	100.0 ±2.0	13.0 ±0.5	330



W	P	E	F	P0	P2	Bo	Ao	Ko	D	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	3.6 ±0.10	2.9 ±0.10	2.6 ±0.10	1.55 +0.5/-0	0.3 ±0.05

Dimensions: mm

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