

Automotive Signal Common Mode Chokes



ACMS-Q4523F

Request Samples



Check Inventory



4.5 x 3.2 x 2.3 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 CANFD

Electrical Specifications

Part Number	Inductance (μH) (+50%/-30%)	DCR ($\text{m}\Omega$)	Rated Current (A)	Rated Voltage (Vdc)	Insulation Resistance ($\text{M}\Omega$)
		Max	Max	Max	Min
ACMS-Q4523F-101	100	2000	0.2	50	10

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

Inductance Test Conditions: 0.1MHz/0.1V

ACMS-Q4523F is AEC-Q200 Automotive certified.

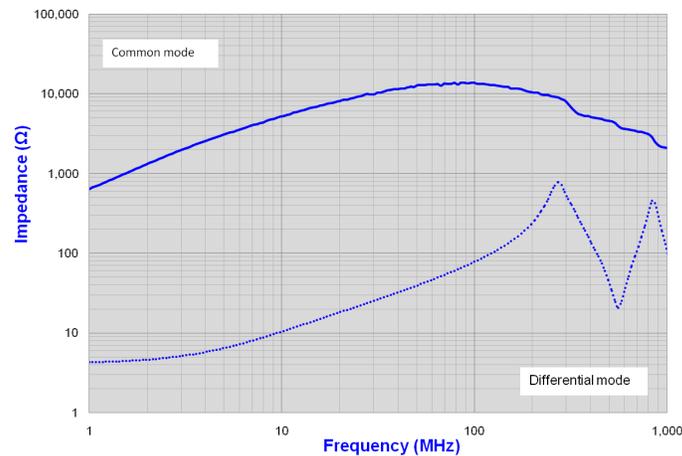
ACMS-Q4523F Series is RoHS Compliant and Pb free.

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



5101 Hidden Creek Ln, Spicewood TX 78669
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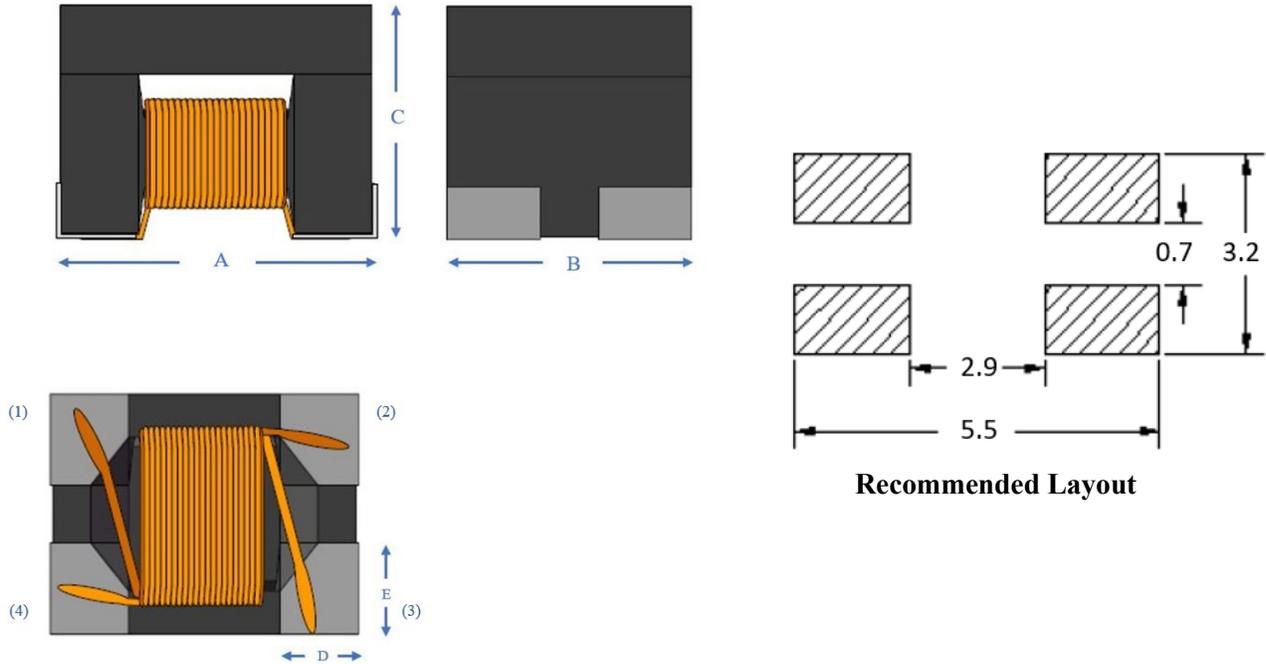


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Mechanical Specifications

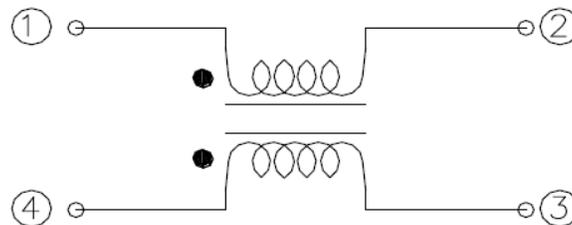


Recommended Layout

A	B	C	D	E
4.5 ±0.2	3.2 ±0.2	2.3 ±0.2	1.0 ±0.1	1.25 ±0.1

Dimensions: mm

Schematic



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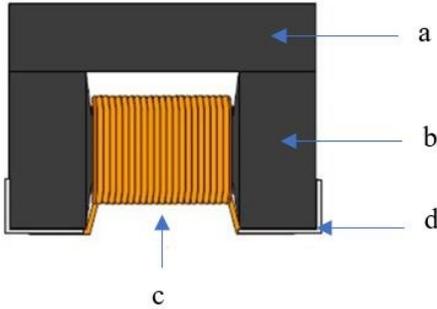


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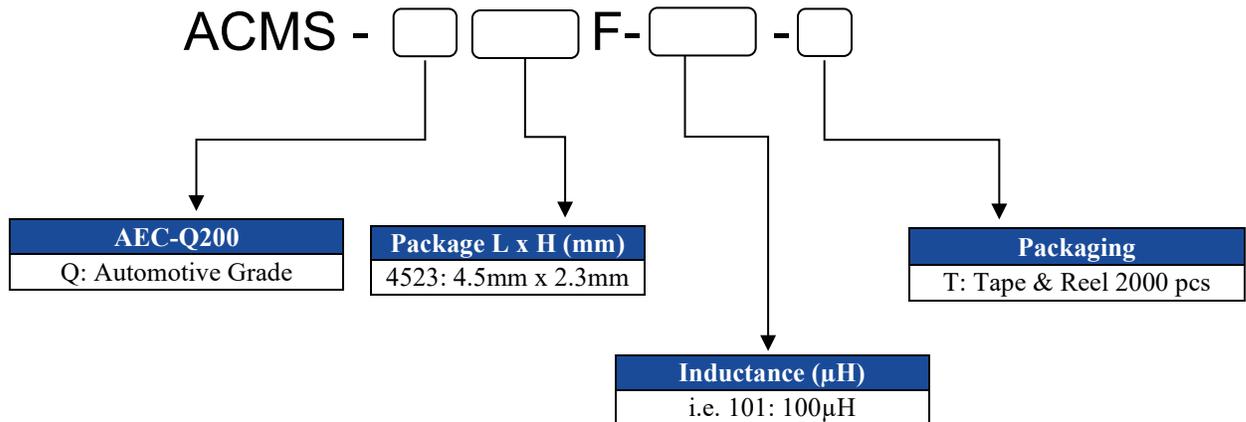
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Materials



	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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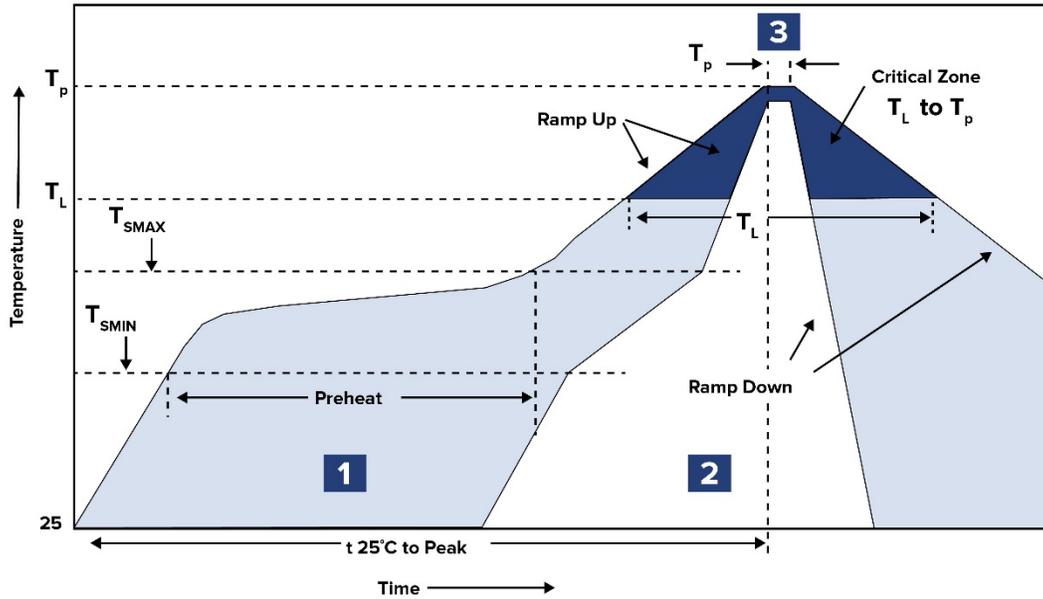


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Reflow Profile



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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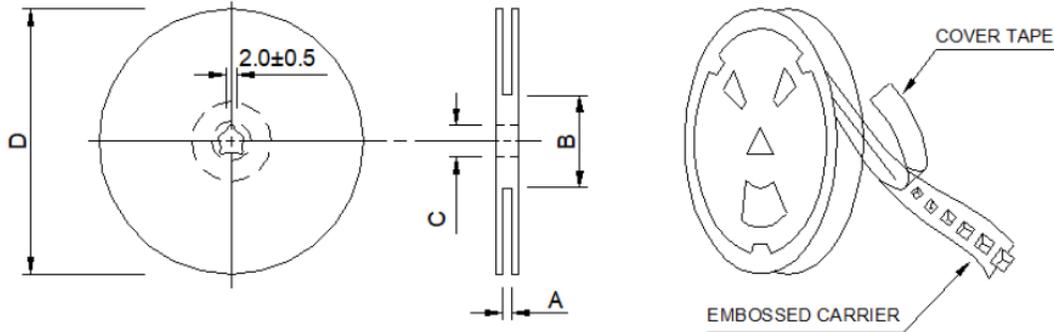
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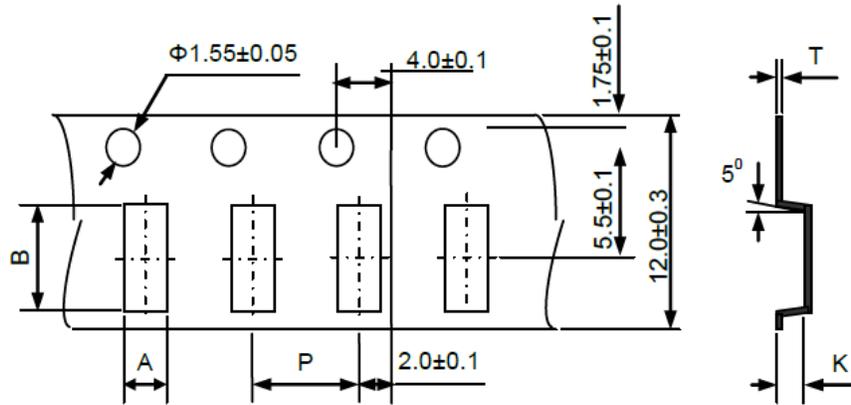
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Packaging

Tape & Reel: 2000pcs/reel



Series	A	B	C	D
ACMS-Q4523F	13.0 ±0.5	100.0 ±2.0	13.0 ±0.5	330



A	B	P	K	T
3.51 ±0.10	4.82 ±0.10	8.0 ± 0.10	3.05 ±0.10	0.35 ±0.05

Dimensions: mm

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