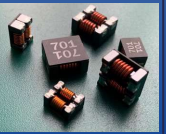


# Automotive Power Common Mode Chokes



ACMP-Q9050

Request Samples



Check Inventory



9.0 x 7.0 x 4.5 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
- Rated current up to 6A
- Extremely low DCR

## Applications

- DC power line common mode noise suppression.
- Multimedia devices
- Automotive power train
- Automotive infotainment

## Electrical Specifications

Part Number	Impedance ( $\Omega$ ) @100MHz		DCR (m $\Omega$ )	Rated Current (A)	Rated Voltage (Vdc)	Insulation Resistance (M $\Omega$ )
	Min	Typ.	Max	Max	Max	Min
ACMP-Q9050-701	500	700	9	6.0	80	10
ACMP-Q9050-102	750	1000	10	5.0	80	10
ACMP-Q9050-152	1000	1500	15	4.5	80	10
ACMP-Q9050-222	1700	2200	25	4.0	80	10
ACMP-Q9050-272	2000	2700	32	3.5	80	10

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

**ACMP-Q9050 is AEC-Q200 Automotive certified.**

**ACMP-Q9050 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, <60% RH.

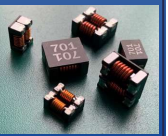


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# Automotive Power Common Mode Chokes



**ACMP-Q9050**

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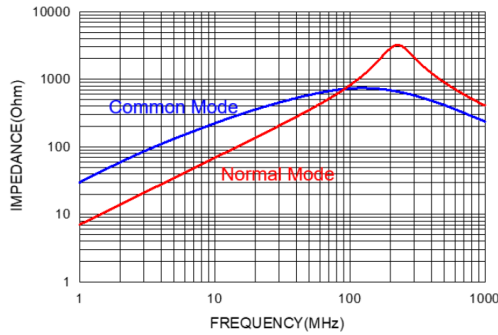
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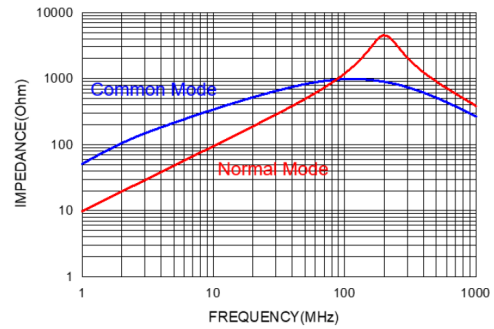
9.0 x 7.0 x 4.5 mm  
RoHS/RoHS II Compliant  
MSL Level = 1

## Electrical Specifications

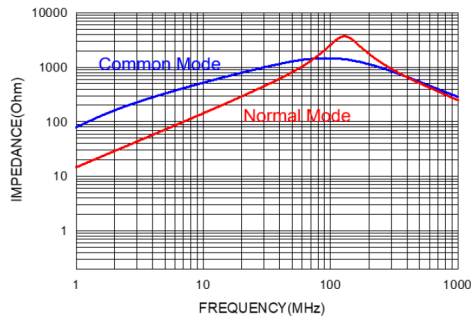
**ACMP-Q9050-701**



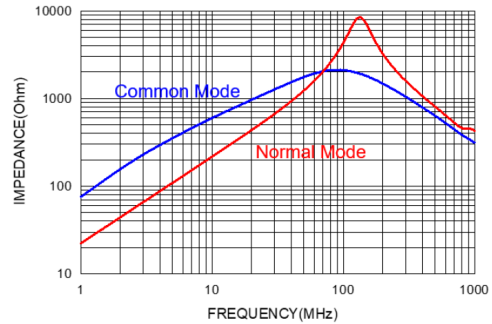
**ACMP-Q9050-102**



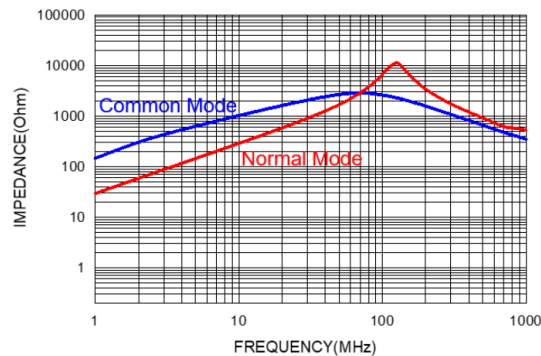
**ACMP-Q9050-152**



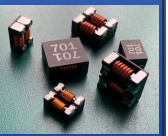
**ACMP-Q9050-222**



**ACMP-Q9050-272**



# Automotive Power Common Mode Chokes



**ACMP-Q9050**

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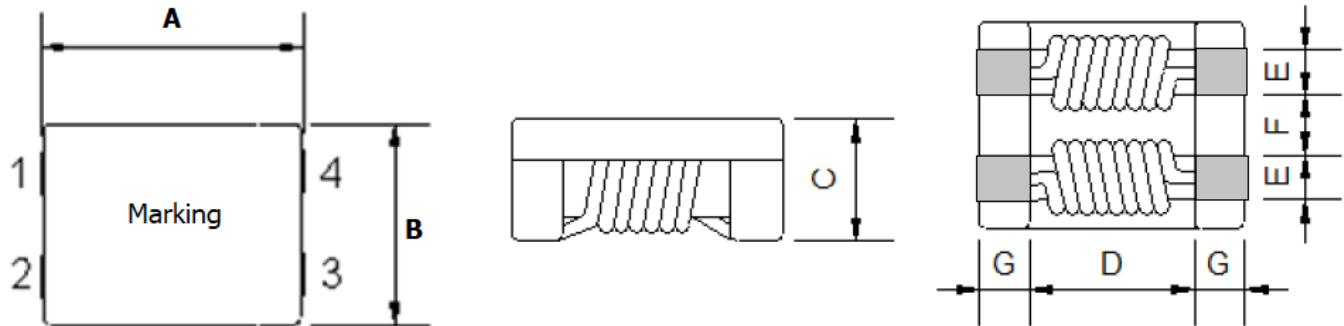


Check Inventory

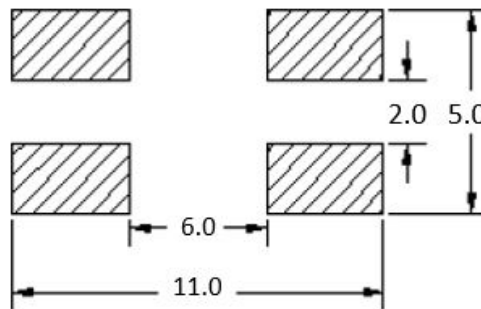


9.0 x 7.0 x 4.5 mm  
**RoHS/RoHS II Compliant**  
 MSL Level = 1

## Mechanical Specifications



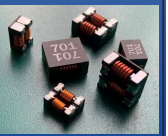
A	B	C	D	E	F	G
9.0 ±0.5	7.0 ±0.5	4.5 Max	5.3 Typ.	1.5 ±0.5	2.1 ±0.5	1.8 ±0.5



## Recommended Layout

Dimensions: mm

# Automotive Power Common Mode Chokes



**ACMP-Q9050**

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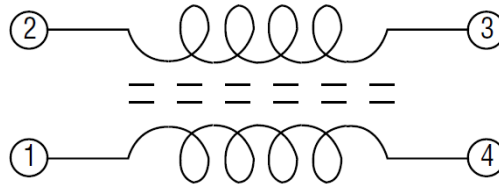


Check Inventory

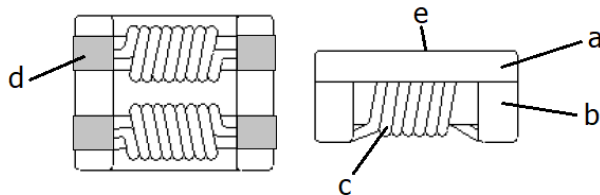


9.0 x 7.0 x 4.5 mm  
**RoHS/RoHS II Compliant**  
 MSL Level = 1

## Schematic

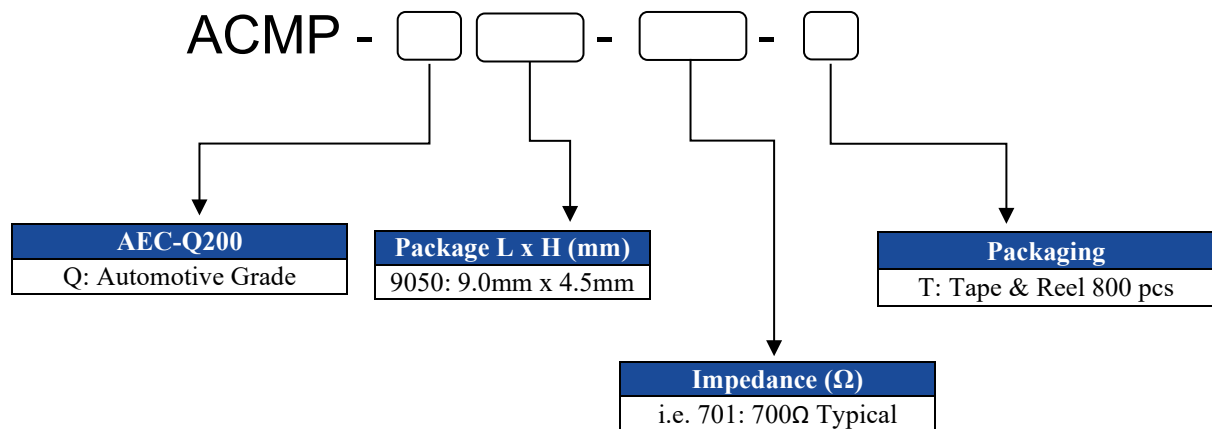


## Materials

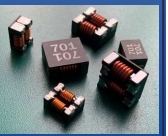


	Description	Specification
a	Upper Plate	Plastic
b	Core	Ferrite Core
c	Wire	Enameled Copper
d	Electrode	Ag/Ni/Sn + Sn Solder
e	Marking	Laser Marking

## Part Identification



# Automotive Power Common Mode Chokes



**ACMP-Q9050**

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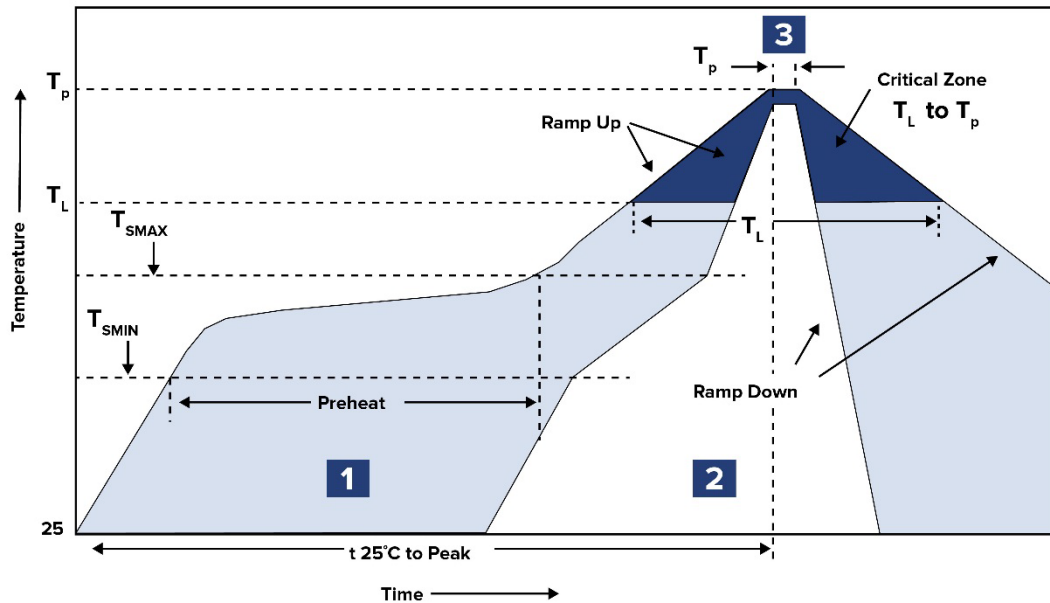


Check Inventory



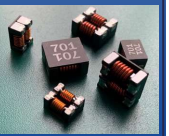
9.0 x 7.0 x 4.5 mm  
**RoHS/RoHS II Compliant**  
 MSL Level = 1

## 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

# Automotive Power Common Mode Chokes



**ACMP-Q9050**

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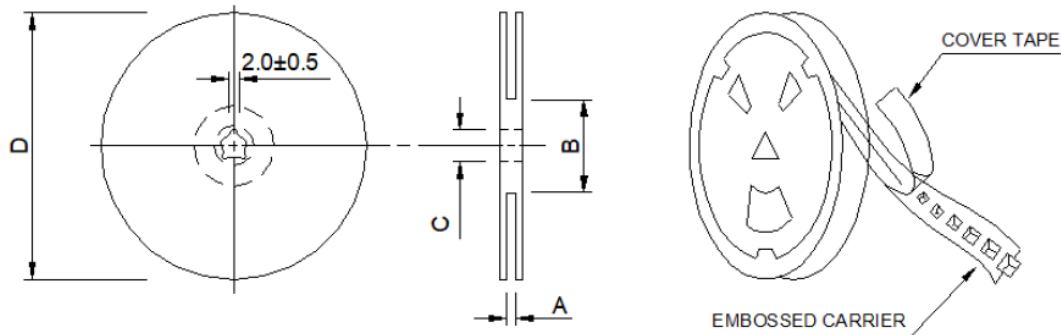
Check Inventory



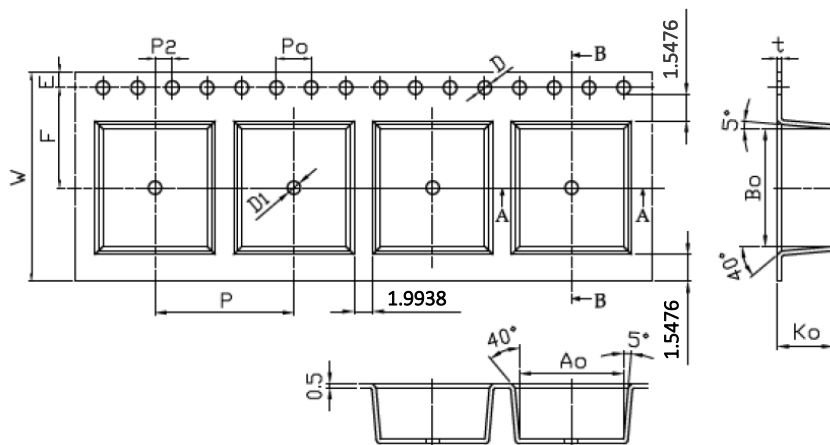
9.0 x 7.0 x 4.5 mm  
**RoHS/RoHS II Compliant**  
 MSL Level = 1

## Packaging

**Tape & Reel: 800pcs/reel**



Series	A	B	C	D
ACMP-Q9050	16.0 ±0.5	100.0 ±2.0	13.5 ±0.5	330



W	P	E	F	P0	P2	Bo	Ao	Ko	D	D1	t
16.0 ±0.30	12 ±0.10	1.75 ±0.10	7.5 ±0.10	4.0 ±0.10	2.0 ±0.10	9.6 ±0.10	8.6 ±0.10	4.6 ±0.10	1.5 +0.10/-0	1.5 ±0.10	0.4 ±0.05

**Dimensions: mm**

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