Automotive Power Common Mode Chokes



ACMP-Q2012

Request Samples Check Inventory

2.0 x 1.2 x 1.2 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 0.4A

Applications

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

Electrical Specifications

Part Number	Impedance (Ω) ±25% @100MHz	DCR (mΩ)	Rated Current (A)	Rated Voltage (Vdc)	Insulation Resistance (MΩ)
		Max	Max	Max	Min
ACMP-Q2012-670	67	250	0.4	50	10
ACMP-Q2012-900	90	300	0.4	50	10
ACMP-Q2012-121	120	300	0.4	50	10
ACMP-Q2012-161	160	350	0.35	50	10
ACMP-Q2012-181	180	350	0.35	50	10
ACMP-Q2012-201	200	400	0.3	50	10
ACMP-Q2012-221	220	400	0.3	50	10
ACMP-Q2012-261	260	400	0.3	50	10
ACMP-Q2012-361	360	500	0.3	50	10

Rated Current is based on an Irms temperature rise of 40°C.
ACMP-Q2012 is AEC-Q200 Automotive certified.
ACMP-Q2012 Series is RoHS Compliant and Pb free.
Operating Temperature: -55°C to +125°C (Including self-heating)
Storage Temperature (on PCB): -55°C to +125°C.
Storage (in original packaging): <40°C, <60% RH.

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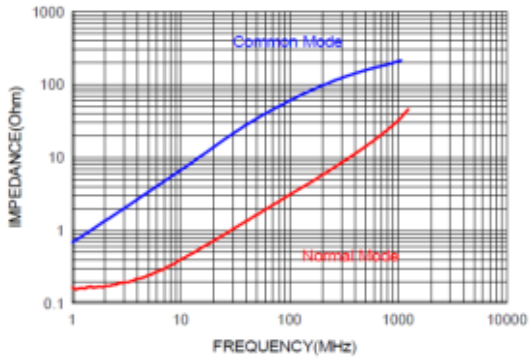
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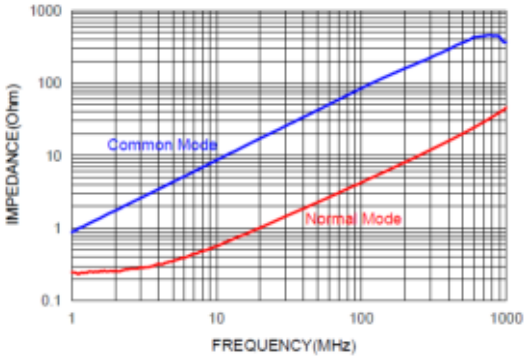
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Electrical Specifications

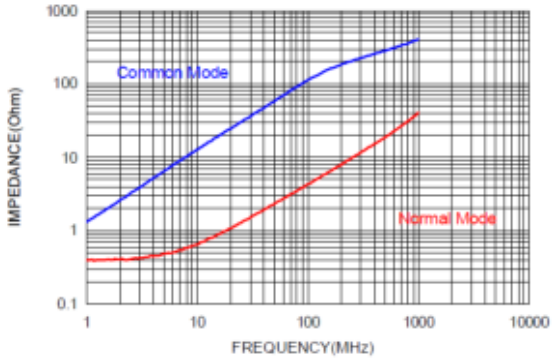
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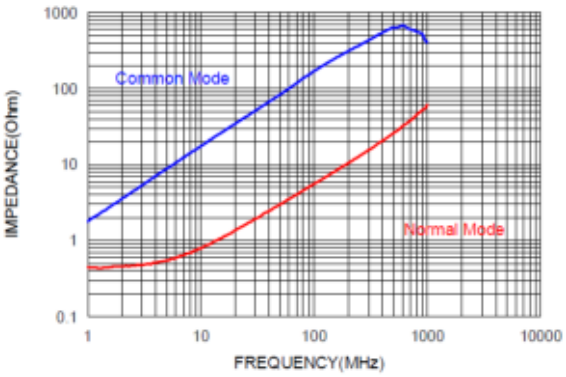
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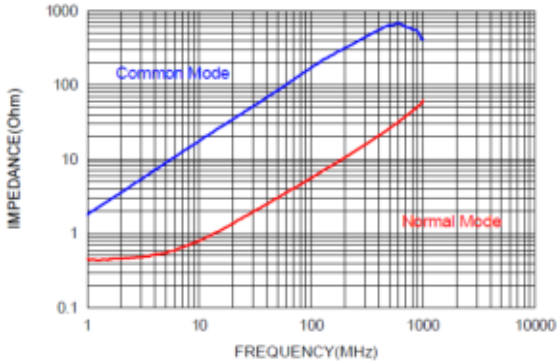
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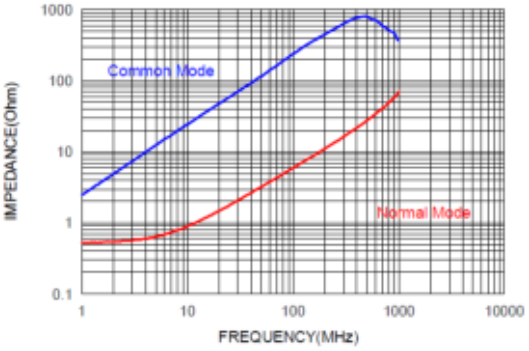
ACMP-Q2012-161



ACMP-Q2012-181



ACMP-Q2012-201



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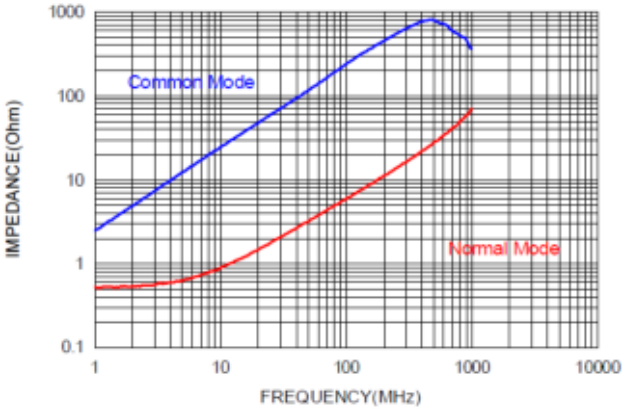
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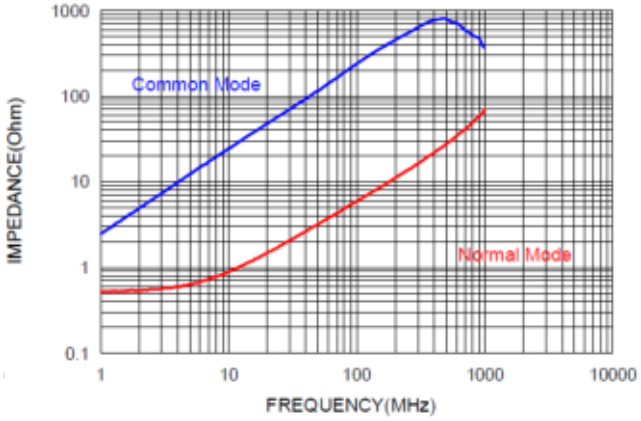
2.0 x 1.2 x 1.2 mm
RoHS/RoHS II Compliant
MSL Level = 1

Electrical Specifications

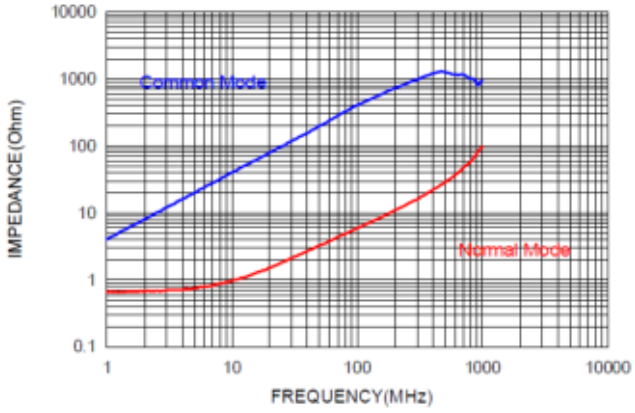
ACMP-Q2012-221



ACMP-Q2012-261



ACMP-Q2012-361



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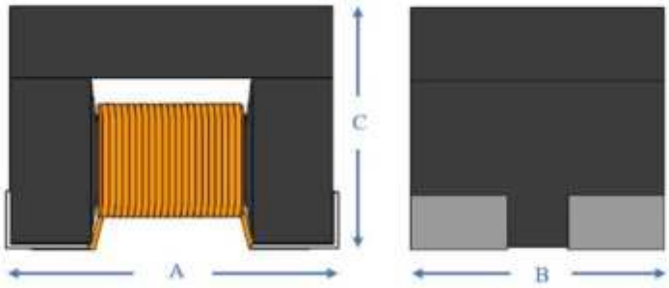


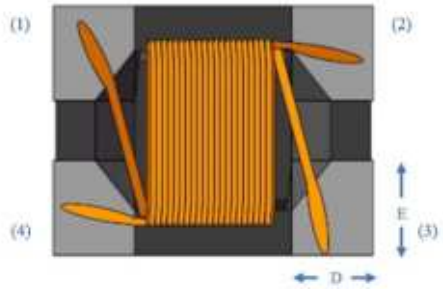
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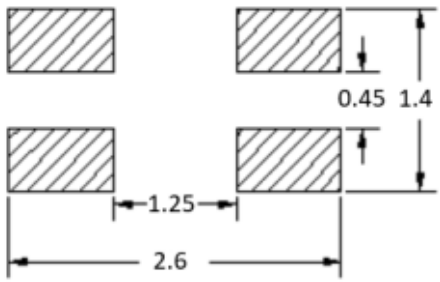
2.0 x 1.2 x 1.2 mm
RoHS/RoHS II Compliant
MSL Level = 1

Mechanical Specifications





A	B	C	D	E
2.0 ±0.2	1.2 ±0.2	1.2 ±0.2	0.50 ±0.1	0.51 ±0.1



Recommended Layout

Dimensions: mm

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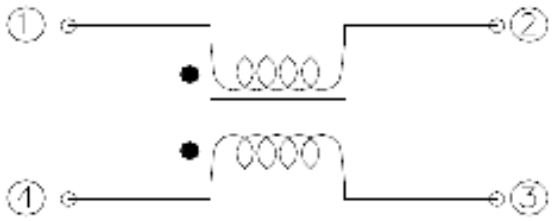


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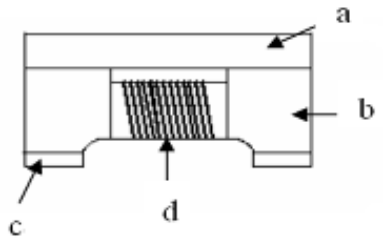
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2.0 x 1.2 x 1.2 mm
RoHS/RoHS II Compliant
MSL Level = 1

Schematic



Materials



	Description	Specification
a	Upper Plate	Ferrite
b	Core	Ferrite Core
c	Electrode	Ag/Ni/Sn
d	Wire	Enameled Copper Wire

Part Identification

ACMP - ☐ ☐ - ☐ - ☐

AEC-Q200	Package L x H (mm)	Impedance (Ω)	Packaging
Q: Automotive Grade	2012: 2.0mm x 1.2mm	i.e. 201: 200Ω	T: Tape & Reel 2000 pcs

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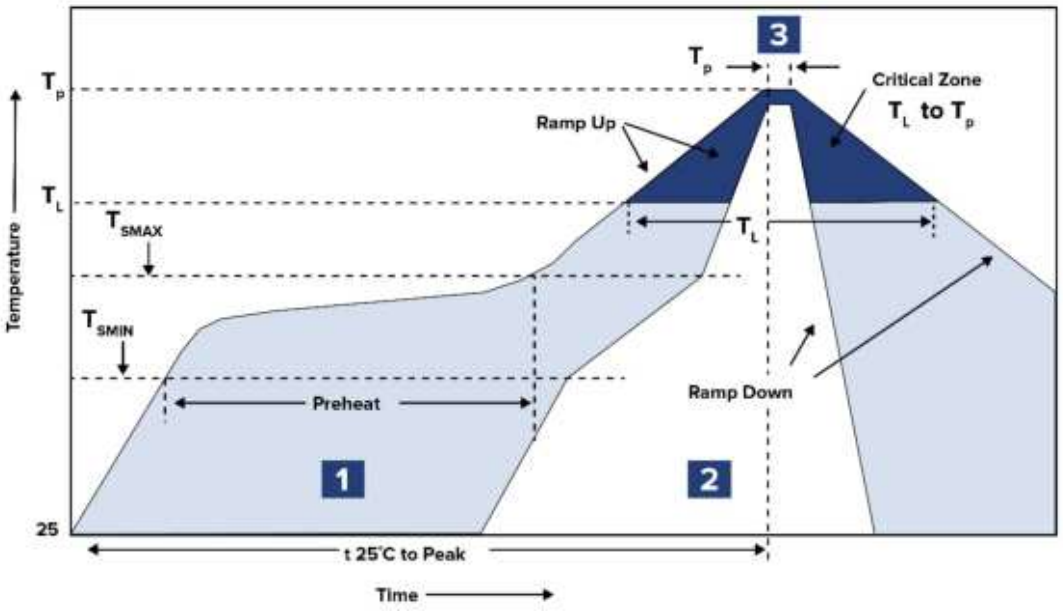


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2.0 x 1.2 x 1.2 mm
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Reflow Profile



Zone	Description	Temperature	Times
1	Preheat	T_{SMIN} ~ T_{SMAX} 150°C ~ 200°C	60 ~ 180 sec.
2	Reflow	T_L 217°C	60 ~ 150 sec.
3	Peak heat	T_P 260°C MAX	10 sec. MAX

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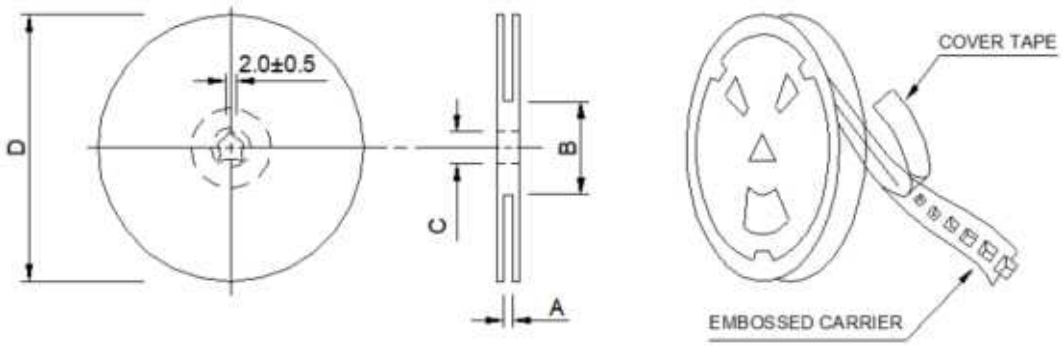
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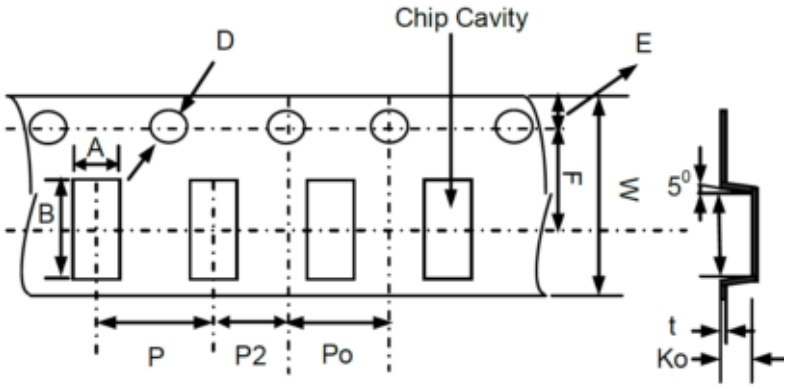
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RoHS/RoHS II Compliant
MSL Level = 1

Packaging

Tape & Reel: 2000pcs/reel



Series	A	B	C	D
ACMP-Q2012	9.0 ±0.5	60.0 ±2.0	13.5 ±0.5	178.0 ±2.0



W	P	E	F	P0	P2	Bo	Ao	Ko	D	D1	t
8.0 ±0.10	4 ±0.10	1.75 ±0.10	3.5 ±0.10	4.0 ±0.10	2.0 ±0.10	2.35 ±0.10	1.5 ±0.10	1.45 ±0.10	1.5 +0.10/-0	1.0 ±0.10	0.28 ±0.05

Dimensions: mm

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