

Automotive Signal Common Mode Chokes



ACMS-Q6527E

Request Samples



Check Inventory



6.5 x 4.5 x 2.7 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 Ethernet

Electrical Specifications

Part Number	Inductance (μH)	Rated Current (A)	DCR (Ω)	Insertion loss (dB) Max		Return Loss (dB) Min		
	Typ.	Max	Max	100 MHz	1-60 MHz	1-10 MHz	30 MHz	60 MHz
ACMS-Q6527E-101	100	0.35	2.0	-3.0	-1.0	-28	-23	-18
	Common Mode Rejection (dB) Min				Differential to Common Mode Rejection (dB) Min			
	1 MHz	10 MHz	60-100 MHz	200-1000 MHz	1-10 MHz	100 MHz	1000 MHz	
	-18	-35	-43	-30	-70	-50	-25	

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

Inductance Test Condition: 0.1V/100KHz

ACMS-Q6527E is AEC-Q200 Automotive certified

ACMS-Q6527E 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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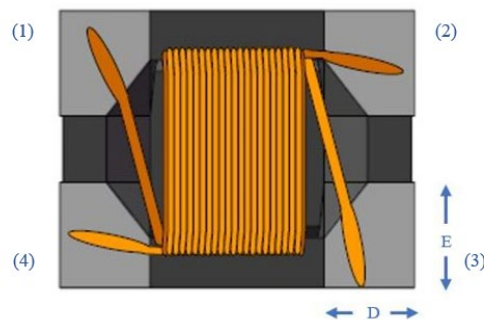
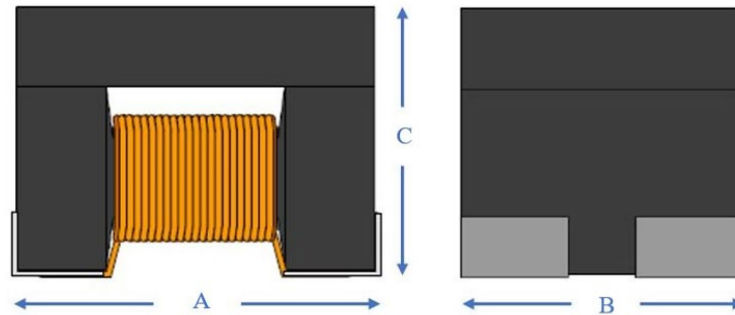


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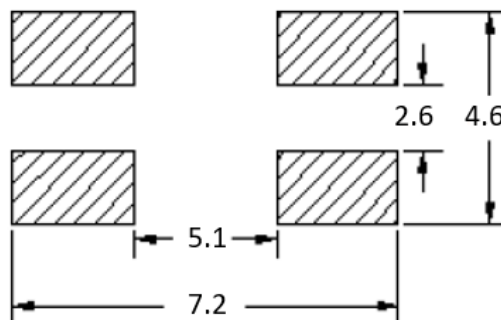


6.5 x 4.5 x 2.7 mm
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Mechanical Specifications



A	B	C	D	E
6.5 ±0.3	4.5 ±0.2	2.7 ±0.2	0.88 ±0.2	0.9 ±0.2



Recommended Layout

Dimensions: mm



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

ACMS - E - -

AEC-Q200
Q: Automotive Grade
Blank: Commercial grade

Package L x H (mm)
6527: 6.5mm x 2.7mm

Inductance (μH)
i.e. 101: 100 μH

Packaging
T: Tape & Reel 500 pcs

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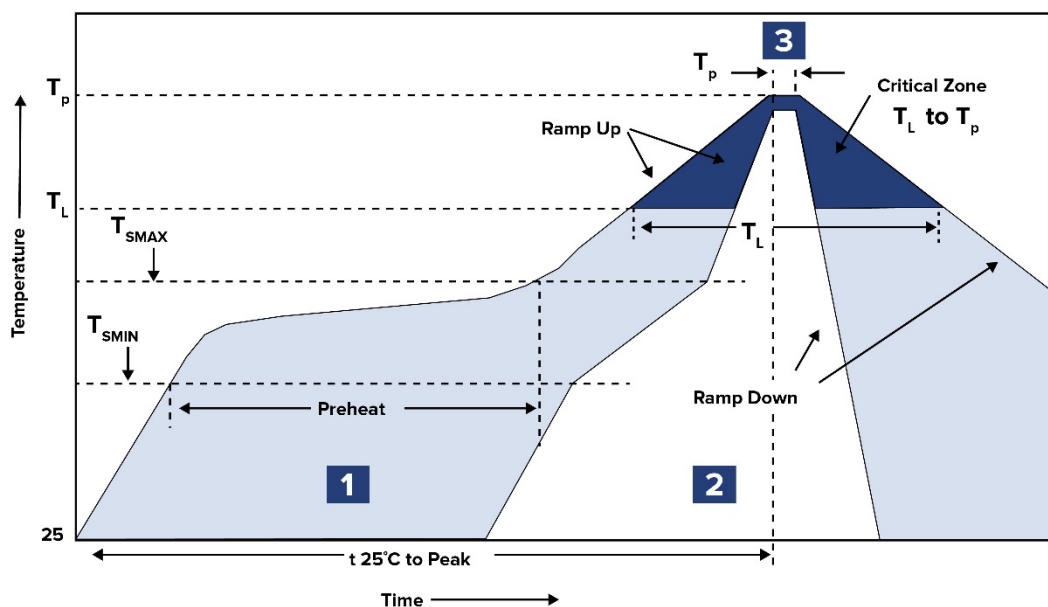


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Reflow Profile



Zone	Description	Temperature	Times
1	Preheat	$T_{SMIN} \sim T_{SMAX}$ $150^{\circ}C \sim 200^{\circ}C$	60 ~ 180 sec.
2	Reflow	T_L $217^{\circ}C$	60 ~ 150 sec.
3	Peak heat	T_P $250^{\circ}C \pm 5^{\circ}C$	10 sec. MAX

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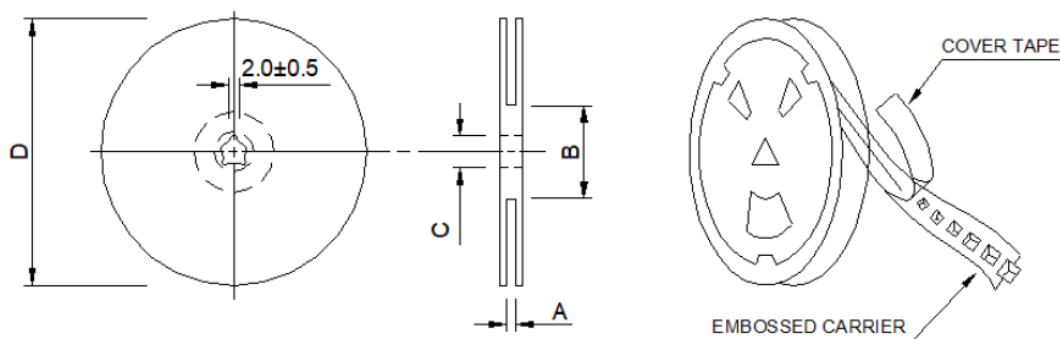
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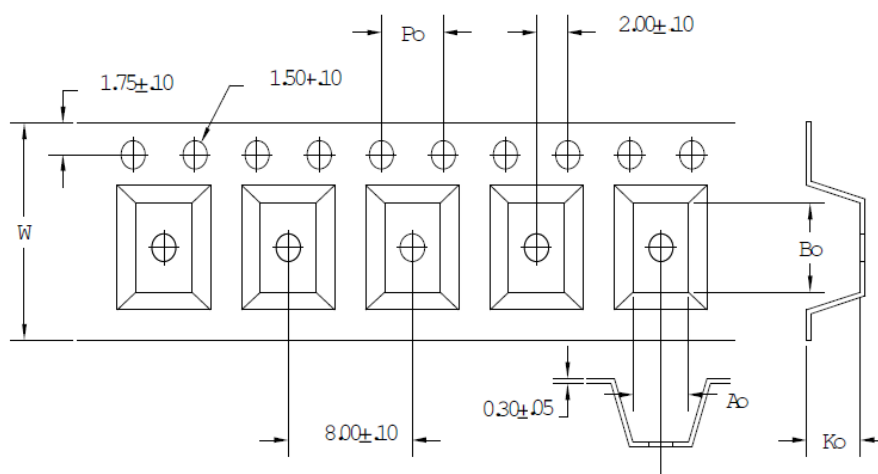
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Packaging

Tape & Reel: 500pcs/reel



Series	A	B	C	D
ACMS-Q6527E	16.7 ±0.5	60.0 ±2.0	13.5 ±0.5	178 ±2.0



W	P0	Bo	Ao	Ko
16.0 ±0.30	4.0 ±0.10	6.9 ±0.10	4.9 ±0.10	2.9 ±0.10

Dimensions: mm

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