

Power Inductor APCK Series

Automotive
AEC-Q200

RoHS Compliant
Halogen Free
REACH Compliant



Power
Circuit

Shield

Assembly

Ferrite

Part Numbering

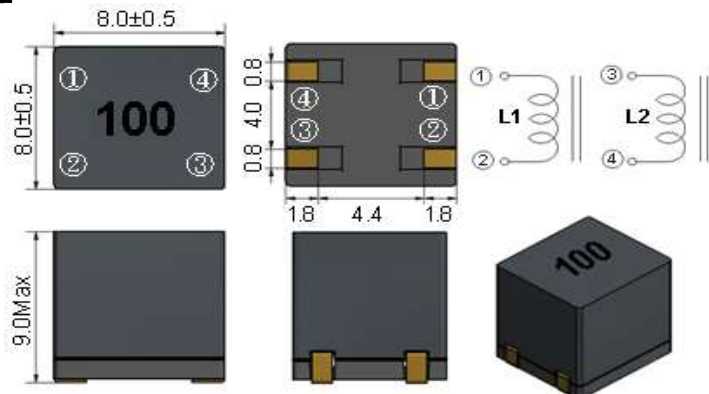
A	PCK	00	080809	100	M	80
Grade	Series Name	Control Code	Dimensions Code (mm)	Inductance (uH)	Tolerance	Internal Code
			080809 8x8x9	100 10	M ±20%	80
			100910 10x9x10		T ±30%	
			131111 12.8x10.5x10.7			

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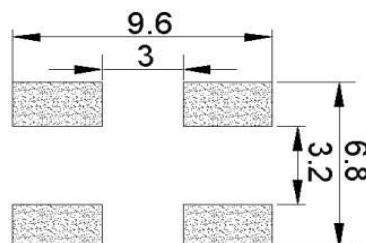
APCK00080809 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

Part No.	Inductance L1,L2(uH)	Test Freq.	RDC (mΩ)Max	Isat (A)	Irms (A)	Tolerance (±%)	Marking
APCK00080809100□80	10	100kHz,0.25V	40	4.3	2.7	20,30	100
APCK00080809220□80	22	100kHz,0.25V	90	3	1.8	20,30	220

Note: When ordering, please specify tolerance code. Tolerance: M=±20% / T=±30%

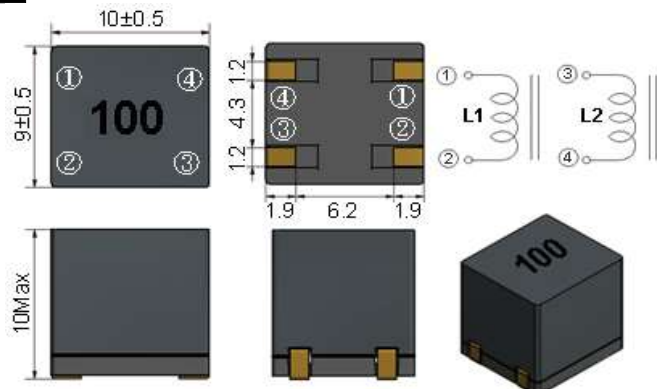
1. Operating temperature range —40°C~165°C(Including self - temperature rise)
2. Isat : Based on Inductance change drop ($\Delta L/L_0$: drop 30% Typ.)@ ambient temp. 25°C
3. Irms : Based on temprature rise (ΔT : 40°C Typ.)
4. Temperature rise allowable current : A rise in temperature of core surface is within 40°C
5. Measure Equipment:
 L: HP4284A PRECISION LCR METER (or equivalent)
 RDC: CHROMA MODEL 16502 MILLIOHMMETER (or equivalent)
 Isat: WK3255BQ+ WK3265B (or equivalent)
 Irms: WK3255BQ+ WK3265B (or equivalent)

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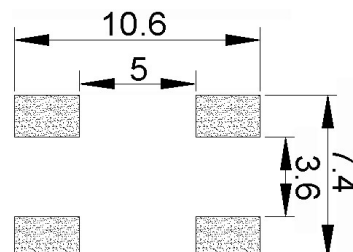
APCK00100910 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

Part No.	Inductance L1,L2(uH)	Test Freq.	RDC (mΩ)Max	Isat (A)	Irms (A)	Tolerance (±%)	Marking
APCK00100910100□80	10	100kHz,0.25V	22	5.0	3.9	20,30	100
APCK00100910220□80	22	100kHz,0.25V	52	3.2	2.5	20,30	220

Note: When ordering, please specify tolerance code. Tolerance: M=±20% / T=±30%

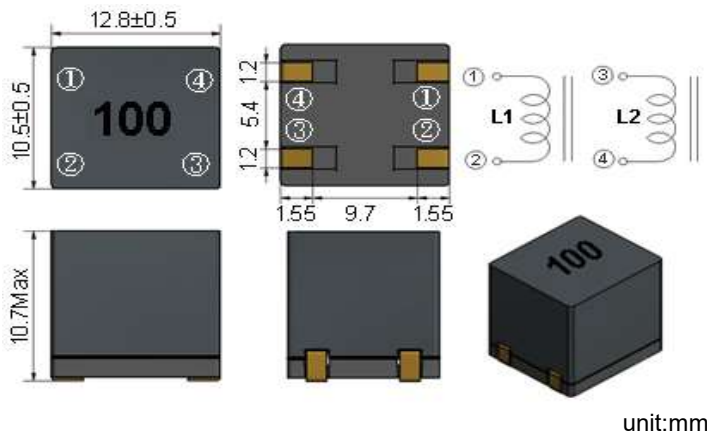
- Operating temperature range —40°C~165°C(Including self - temperature rise)
- Isat : Based on Inductance change drop ($\Delta L/L_0$: drop 30% Typ.)@ ambient temp. 25°C
- Irms : Based on temprature rise (ΔT : 40°C Typ.)
- Temperature rise allowable current : A rise in temperature of core surface is within 40°C
- Measure Equipment:
L: HP4284A PRECISION LCR METER (or equivalent)
RDC: CHROMA MODEL 16502 MILLIOHMMETER (or equivalent)
Isat: WK3255BQ+ WK3265B (or equivalent)
Irms: WK3255BQ+ WK3265B (or equivalent)

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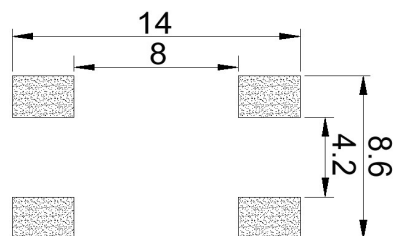
APCK00131111 Type

■ Dimensions



unit:mm

■ Recommended Land Pattern



unit:mm

■ Electrical Characteristics

Part No.	Inductance L1,L2(uH)	Test Freq.	RDC (mΩ)Max	Isat (A)	Irms (A)	Tolerance (±%)	Marking
APCK00131111100□80	10	100kHz,0.25V	18	7.1	4.2	20,30	100

Note: When ordering, please specify tolerance code. Tolerance: M=±20% / T=±30%

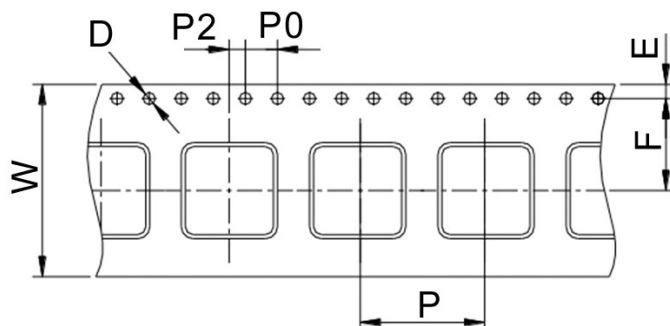
- Operating temperature range — 40°C~165°C(Including self - temperature rise)
- Isat : Based on Inductance change drop ($\Delta L/L_0$: drop 30% Typ.)@ ambient temp. 25°C
- Irms : Based on temprature rise (ΔT : 40°C Typ.)
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L: HP4284A PRECISION LCR METER (or equivalent)
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Isat: WK3255BQ+ WK3265B (or equivalent)
Irms: WK3255BQ+ WK3265B (or equivalent)

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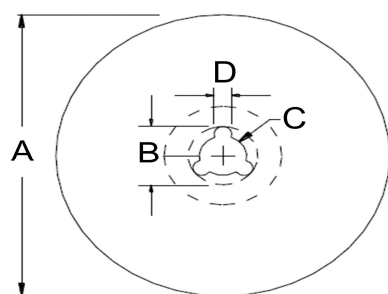
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■ Packaging

Tape Dimensions



Reel Dimensions



Dimensions in mm

TYPE	Tape Dimensions							Reel Dimensions				Quantity PCS / REEL
	W	D	E	F	P	P0	P2	A	B	C	D	
APCK00080809	24	1.5	1.75	11.5	16	4	2	330	20	13	2	400
APCK00100910	24	1.5	1.75	11.5	16	4	2	330	20	13	2	300
APCK00131111	24	1.5	1.75	11.5	16	4	2	330	20	13	2	300