



# Power Inductor Apcf Series

Automotive  
AEC-Q200

RoHS Compliant  
Halogen Free  
REACH Compliant



Power  
Circuit

Shield

Wire  
Wound

Ferrite

## Part Numbering

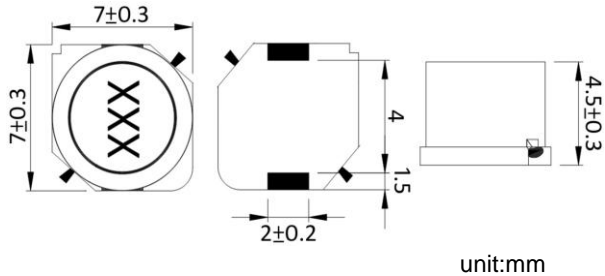
A	PCF	00	070745	1R0	M	00
Grade	Series Name	Control Code	Dimensions Code (mm)	Inductance (uH)	Tolerance	Internal Code
			070745 7x7x4.5	1R0 1	M ±20%	
			131375 12.5x12.5x7.5	100 10	T ±30%	
				101 100		

**Power Inductor APCF Series**

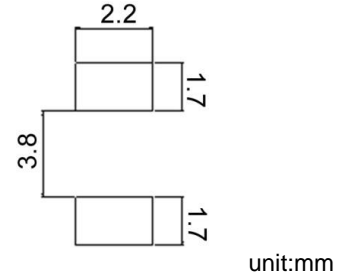
**Automotive  
AEC-Q200**

**APCF00070745 Type**

**■ Dimensions**



**■ Recommended Land Pattern**



**■ Electrical Characteristics**

Part No.	Inductance (uH)	Test Freq.	RDC (Ω)±20%	Isat (A)Max	Irms (A)Typ	Tolerance (±%)	Marking
APCF000707451R0□00	1.0	100kHz,0.5V	0.011	4.5	4.5	20,30	1R0
APCF000707452R2□00	2.2	100kHz,0.5V	0.015	3.4	3.3	20,30	2R2
APCF000707453R3□00	3.3	100kHz,0.5V	0.02	2.5	2.3	20,30	3R3
APCF000707454R7□00	4.7	100kHz,0.5V	0.03	2	2.1	20,30	4R7
APCF000707456R8□00	6.8	100kHz,0.5V	0.039	1.7	1.74	20,30	6R8
APCF00070745100□00	10	100kHz,0.5V	0.036	1.3	1.78	20,30	100
APCF00070745150□00	15	100kHz,0.5V	0.052	1.1	1.53	20,30	150
APCF00070745220□00	22	100kHz,0.5V	0.061	0.9	1.34	20,30	220
APCF00070745330□00	33	100kHz,0.5V	0.096	0.82	1.09	20,30	330
APCF00070745470□00	47	100kHz,0.5V	0.125	0.75	0.92	20,30	470
APCF00070745680□00	68	100kHz,0.5V	0.175	0.6	0.77	20,30	680
APCF00070745101□00	100	100kHz,0.5V	0.25	0.5	0.65	10,20	101
APCF00070745151□00	150	100kHz,0.5V	0.34	0.4	0.55	10,20	151
APCF00070745221□00	220	100kHz,0.5V	0.52	0.33	0.45	10,20	221
APCF00070745331□00	330	100kHz,0.5V	0.74	0.25	0.37	10,20	331
APCF00070745471□00	470	100kHz,0.5V	1.05	0.22	0.31	10,20	471
APCF00070745681□00	680	100kHz,0.5V	1.48	0.2	0.27	10,20	681
APCF00070745102□00	1000	100kHz,0.5V	2.28	0.14	0.25	10,20	102

**Note: When ordering, please specify tolerance code. Tolerance: K=±10% / M=±20% / T=±30%**

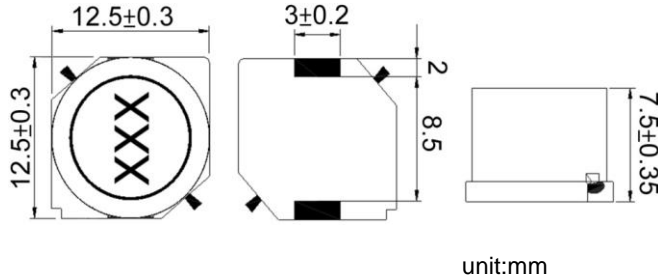
- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Isat for Inductance drop 15% from its value without current
- Irms for a 25°C temprature rise from 25°C ambient with current
- Rated DC Current: The less value which is Isat or Irms
- Measure Equipment:
  - L: HP4284A PRECISION 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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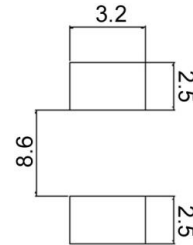
**APCF00131375 Type**

**■ Dimensions**



unit:mm

**■ Recommended Land Pattern**



unit:mm

**■ Electrical Characteristics**

Part No.	Inductance (uH)	Test Freq.	RDC (Ω)±20%	Isat (A)Max	Irms (A)Typ	Tolerance (±%)	Marking
APCF001313751R2□00	1.2	100kHz,0.5V	0.0069	13	8.2	30	1R2
APCF001313752R7□00	2.7	100kHz,0.5V	0.0094	10	7	30	2R7
APCF001313753R9□00	3.9	100kHz,0.5V	0.0104	9	6.7	30	3R9
APCF001313755R6□00	5.6	100kHz,0.5V	0.0116	7.8	6.3	30	5R6
APCF001313756R8□00	6.8	100kHz,0.5V	0.0131	7.2	5.9	30	6R8
APCF00131375100□00	10	100kHz,0.5V	0.0156	5.5	5.4	20,30	100
APCF00131375150□00	15	100kHz,0.5V	0.0184	4.7	5	20,30	150
APCF00131375220□00	22	100kHz,0.5V	0.0263	4	4	20,30	220
APCF00131375330□00	33	100kHz,0.5V	0.0395	3.2	3.4	20,30	330
APCF00131375470□00	47	100kHz,0.5V	0.0528	2.7	3	20,30	470
APCF00131375680□00	68	100kHz,0.5V	0.0778	2	2.4	20,30	680
APCF00131375101□00	100	100kHz,0.5V	0.125	1.9	1.9	20,30	101
APCF00131375151□00	150	100kHz,0.5V	0.175	1.5	1.6	20,30	151
APCF00131375221□00	220	100kHz,0.5V	0.258	1.3	1.3	20,30	221

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

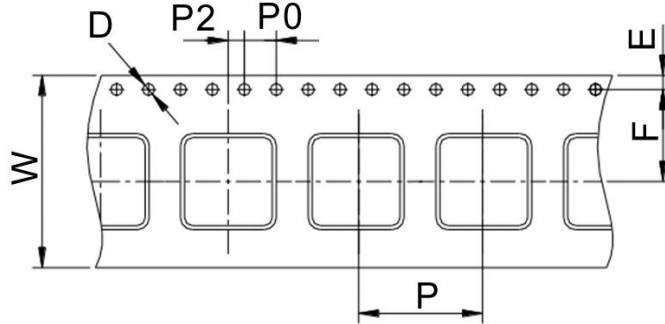
- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Isat for Inductance drop 10% from its value without current
- Irms for a 40°C temprature rise from 25°C ambient with current
- Rated DC Current: The less value which is Isat or Irms
- Measure Equipment:  
 L: HP4284A PRECISION LCR METER (or equivalent)  
 RDC: CHROMA MODEL 16502 MILLIOHMETER (or equivalent)  
 Isat:WK3255BQ+ WK3265B (or equivalent)  
 Irms: WK3255BQ+ WK3265B (or equivalent)

**Power Inductor APCF Series**

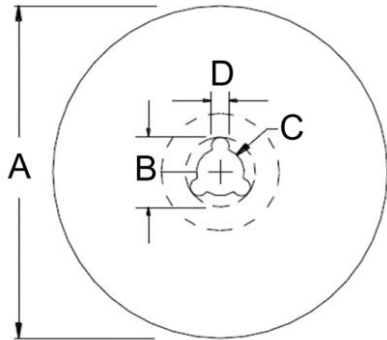
**Automotive  
AEC-Q200**

**■ 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	
APCF00070745	16	1.5	1.75	7.5	12	4	2	330	20	13	2	1000
APCF00131375	24	1.5	1.75	11.5	16	4	2	330	20	13	2	500