

# POWER INDUCTOR

## SPI-7070HPM(A) SERIES

### Metal Powder - Molded type



#### FEATURES

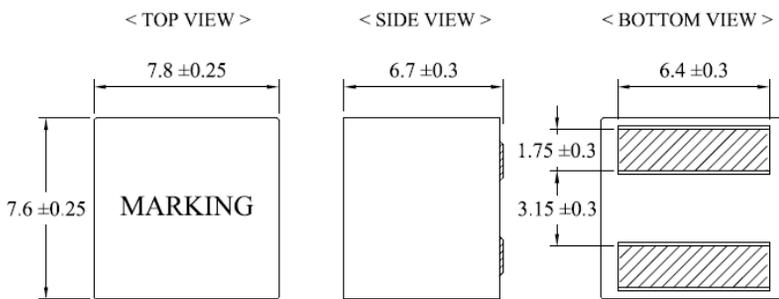
- High current
- Larger terminations for lower DCR and stronger solder joint
- Soft saturation characteristics
- Ultra low buzz noise due to molding construction
- Rugged mechanical construction
- Operating Temperature range : -40°C to +125°C
- AEC-Q200 qualified

#### APPLICATION

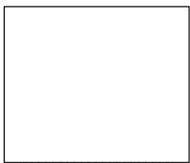
- Power, DC/DC converters (ex. Network equipment)
- Automotive-related equipment



#### SHAPE & DIMENSIONS

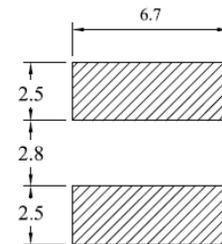


< FRONT VIEW >

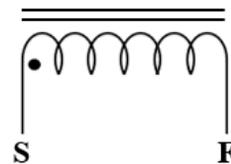


(Dimension in mm)

#### LAND PATTERN



#### SCHEMATIC



#### PART NUMBER CONSTRUCTION

SPI - 7070 HPM(A) - 3R3

Inductance value

Material & Shape

Size Code

Product Code

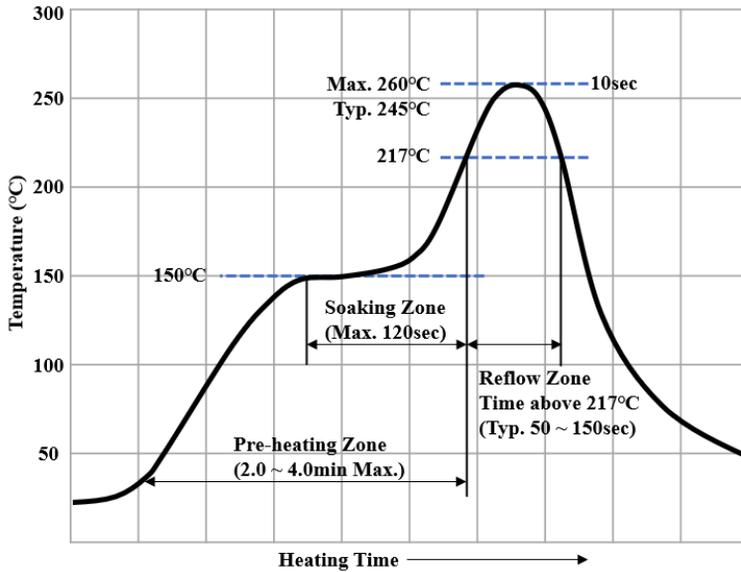
## ► ELECTRICAL SPECIFICATION

Part No.	Inductance (uH)	Tol	DC Resistance		Saturation Rated Current (Isat)	Temperature Rise Current (Irms)
			mΩ Typ.	mΩ Max.	A, Typ.	A, Typ.
SPI-7070HPM(A)-3R3	3.3	±20%	7.96	9.42	17.4	12.9
SPI-7070HPM(A)-4R7	4.7	±20%	12.1	14.3	13.6	10.0
SPI-7070HPM(A)-6R8	6.8	±20%	12.3	19.6	12.8	9.2

### ※ General Specification

- All test data is referenced to 25°C ambient.
- Inductance Test Conditions : 100KHz, 0.1V
- Isat : Saturation rated current at which the inductance drop 30% (typ.) from its value without current
- Irms : The rated current causes the coil temperature rise approximately  $\Delta T \leq 40^{\circ}\text{C}$ . without core Loss.

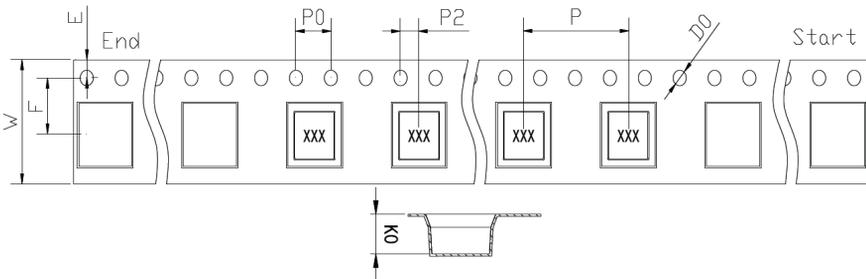
## ► SOLDERING PROFILE < REFLOW >



Profile Feature	Pb-Free System
Average Ramp-up Rate	~ 3°C/sec
<b>Preheat</b> - Temperature Range - Time	25°C ~ 217°C 120 ~ 240sec
Time maintained above - Temperature - Time	217°C 50 ~ 150sec
Peak Temperature	260°C Max.
Time within +0/-5°C of actual Peak	10sec
Ramp-Down Rate	4°C/sec Max.

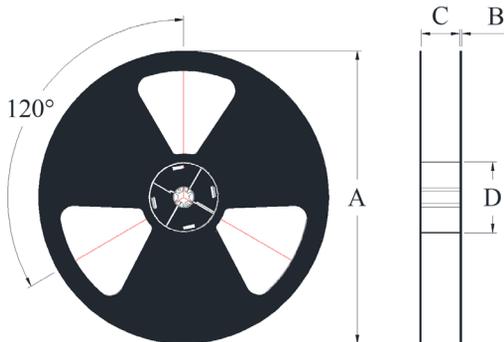
## ► PACKING SPECIFICATION

### ■ CARRIER REEL (Dimension in mm)



Item	Size
W	16.0
K0	7.3
P	12.0
P0	4.0
P2	2.0
F	7.5
E	1.75
D0	1.5

### ■ REEL BOBBIN (Dimension in mm)



Item	Size
A	330
B	2.3
C	16.5
D	100

SPI-7070HPM(A) SERIES	Method	Package quantity
	Carrier Reel	700pcs