

# SMD

## HIGH CURRENT INDUCTORS

MODEL NO : PSC-210145 HF SERIES



### FEATURES:

- \* LOW CORE LOSS AND HIGH EFFICIENCY PERFORMANCE.
- \* CLOSED MAGNETIC FIELD CONSTRUCTION FOR HIGH DENSITY BOARD ASSEMBLY.
- \* COMPLIANT WITH RoHS AND HALOGEN FREE.
- \* RECOMMENDED SOLDER PROFILE: REFLOW.

### APPLICATION:

\* DC/DC CONVERTER IN POWER REGULATION SYSTEM.

### ELECTRICAL SPECIFICATION:

| MODEL NO          | INDUCTANCE<br>$\pm 15\%$<br>( $\mu\text{H}$ ) | DCR<br>$\pm 10\%$<br>( $\text{m}\Omega$ ) | TEMPERATURE<br>RISE CURRENT<br>(ADC) | SATURATION<br>CURRENT<br>(ADC)<br>(NOTE 3) |
|-------------------|-----------------------------------------------|-------------------------------------------|--------------------------------------|--------------------------------------------|
| PSC-210145-R70 HF | 0.7                                           | 0.83                                      | 55.0                                 | 75                                         |
| PSC-210145-1R4 HF | 1.4                                           | 1.08                                      | 48.0                                 | 60                                         |
| PSC-210145-2R2 HF | 2.2                                           | 1.50                                      | 39.0                                 | 50                                         |
| PSC-210145-3R1 HF | 3.1                                           | 2.09                                      | 36.0                                 | 43                                         |
| PSC-210145-4R2 HF | 4.2                                           | 3.04                                      | 25.0                                 | 38                                         |
| PSC-210145-5R5 HF | 5.5                                           | 4.00                                      | 23.0                                 | 33                                         |
| PSC-210145-7R0 HF | 7.0                                           | 5.61                                      | 21.0                                 | 30                                         |
| PSC-210145-8R6 HF | 8.6                                           | 7.19                                      | 17.0                                 | 25                                         |
| PSC-210145-100 HF | 10                                            | 7.96                                      | 16.0                                 | 23                                         |
| PSC-210145-150 HF | 15                                            | 8.70                                      | 15.0                                 | 21                                         |
| PSC-210145-220 HF | 22                                            | 10.65                                     | 13.0                                 | 15                                         |
| PSC-210145-330 HF | 33                                            | 11.4                                      | 13.0                                 | 11                                         |
| PSC-210145-470 HF | 47                                            | 12.2                                      | 12.0                                 | 8.5                                        |

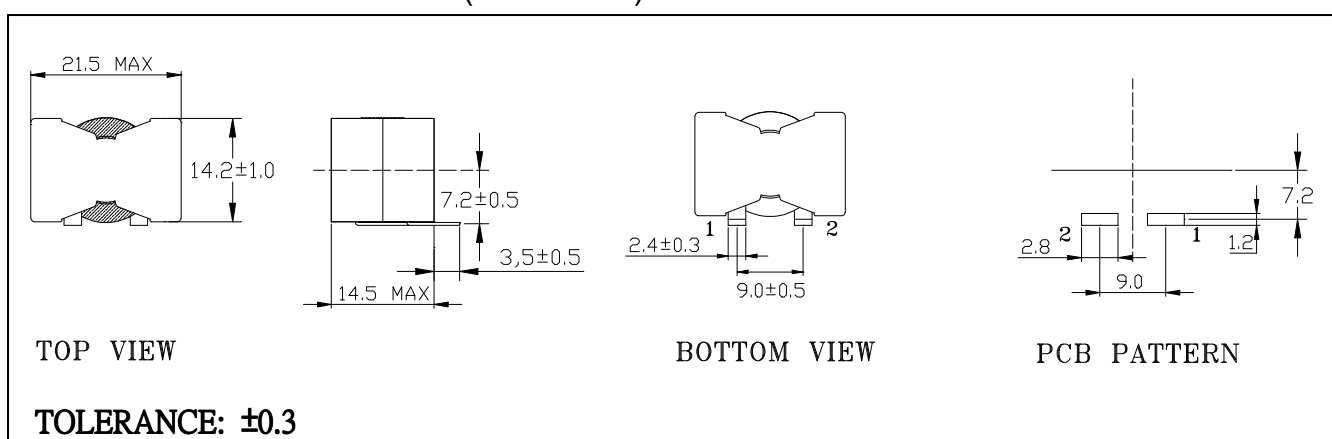
NOTE (1): Test frequency: 100 KHZ ,0.1Vrms.

NOTE (2):  $\Delta T=50^\circ\text{C}$  approximately under the temperature rise current.

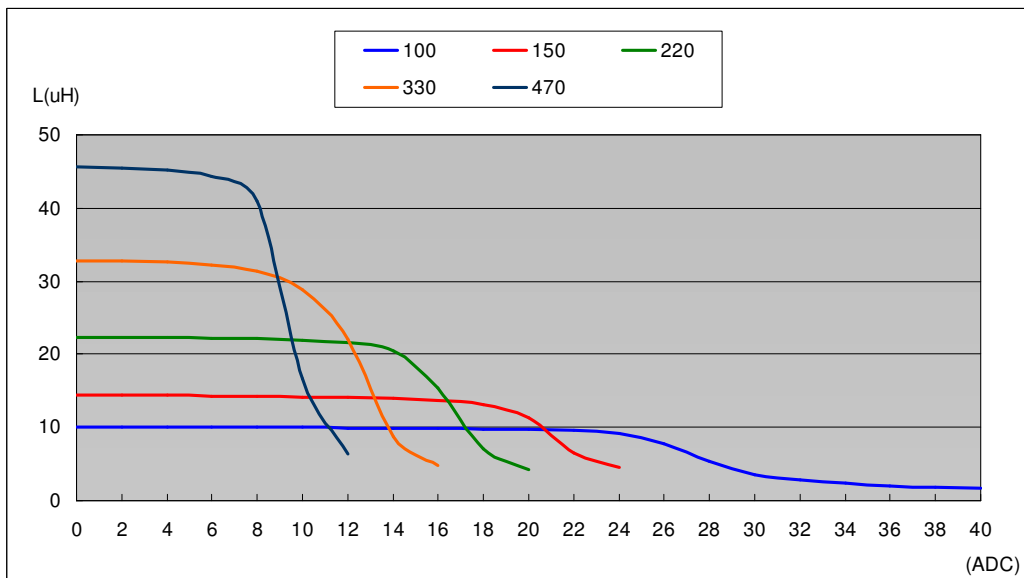
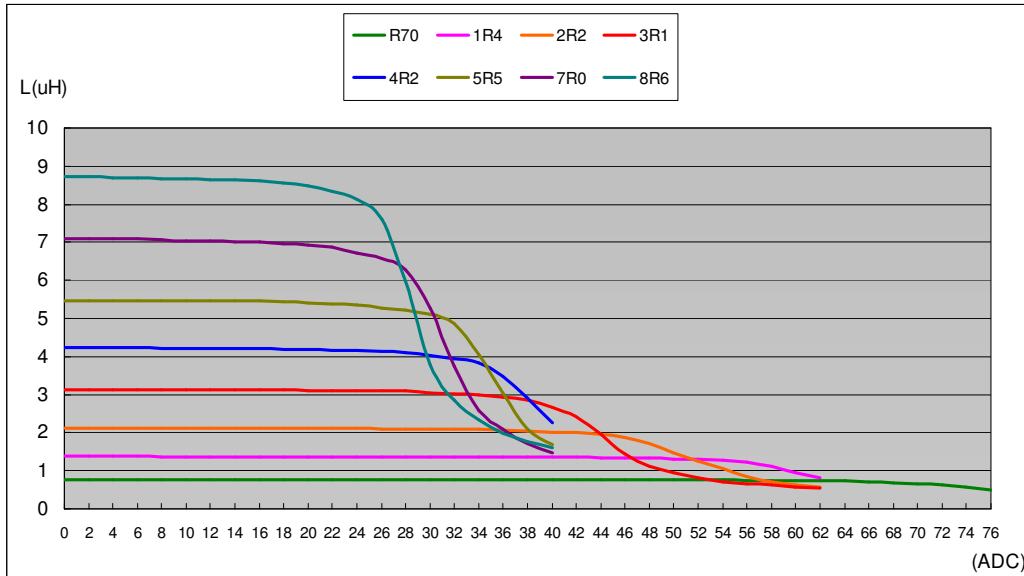
NOTE (3): The saturation current indicates the value of DC current is approximately 30% lower than its initial value of inductance.

NOTE(4): Operating temperature range:  $-40^\circ\text{C} \sim +150^\circ\text{C}$ .

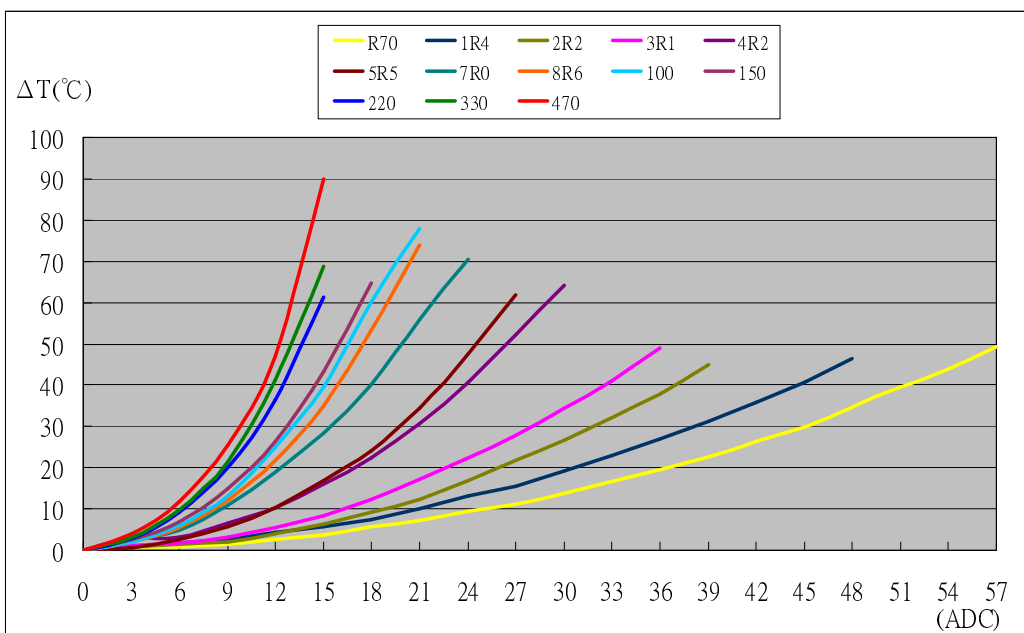
### PHYSICAL DIMENSION : (UNIT:mm)



## INDUCTANCE VS DC BIAS:



## TEMPERATURE VS DC BIAS :



1. REEL SIZE & UNITS PER REEL :13",120PCS.
2. TAPE WIDTH:44mm.
3. REEL WIDTH: 50mm
4. COMPONENT PITCH:32mm