

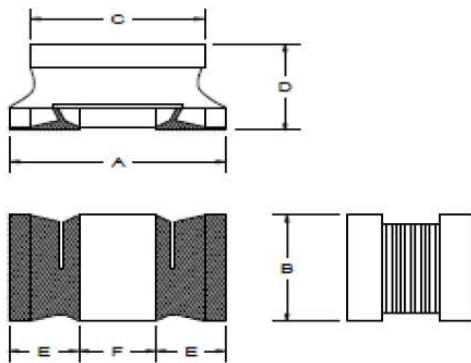
● FEATURE

1. Low profile and small size
2. Low DC resistance

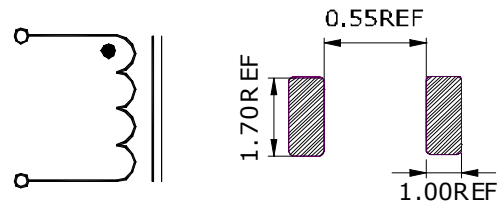
● Applications

1. Cell phone and other portable used

● Shape and Dimension



● Schematics and Land Patterns(mm)

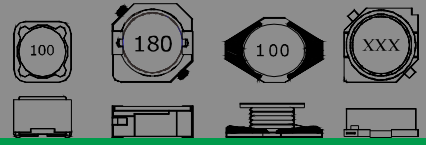


A=3.20±0.3 mm; B=1.60±0.20 mm(do not include Epoxy); C=2.50±0.3 mm; (do not include Epoxy); D=1.80±0.25mm ; E=0.90mm REF.;F=1.30mm REF.

● Specification

Part Number	L(uH)	Inductance tolerance	SRF(MHz) min.	DCR (ΩMax)	IDC(A) (Max)
EPQH321618C-R12□-R	0.12	M	250	0.112	970
EPQH321618C-R22□-R	0.22	M	250	0.140	850
EPQH321618C-R33□-R	0.33	M	200	0.160	800
EPQH321618C-R47□-R	0.47	M	180	0.210	700
EPQH321618C-1R0□-R	1.0	M	100	0.390	510
EPQH321618C-2R2□-R	2.2	M	50	0.570	430
EPQH321618C-4R7□-R	4.7	M	31	0.910	340
EPQH321618C-5R6□-R	5.6	M	27.5	0.950	330
EPQH321618C-6R8□-R	6.8	M	24	1.32	300
EPQH321618C-8R2□-R	8.2	M	22	1.72	240
EPQH321618C-100□-R	10	K · M	20	1.82	230
EPQH321618C-120□-R	12	K · M	18	1.92	200
EPQH321618C-150□-R	15	K · M	16	2.02	190
EPQH321618C-180□-R	18	K · M	15	2.45	180

# SMD POWER INDUCTOR – EPQH321618C-R SERIES



Part Number	L(uH)	Inductance tolerance	SRF(MHz) min.	DCR (ΩMax)	IDC(mA) (Max)
EPQH321618C-220□-R	22	K , M	14	4.20	160
EPQH321618C-270□-R	27	K , M	12	4.50	150
EPQH321618C-330□-R	33	K , M	10	7.50	130
EPQH321618C-560□-R	56	K , M	8.5	11.7	98
EPQH321618C-680□-R	68	K , M	8	12	95
EPQH321618C-820□-R	82	K , M	7.5	13.5	85
EPQH321618C-101□-R	100	K , M	7	16.8	80
EPQH321618C-121□-R	120	K , M	6.5	17.2	75
EPQH321618C-151□-R	150	K , M	6	18.2	70

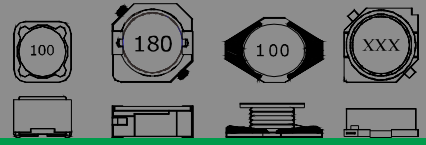
Note1. Measurement frequency of Inductance value : at 100KHz

Note2. Measurement ambient temperature of L, DCR and IDC : at 25°C

Note3. IDC : This indicates the value of current when the inductances is 10% typical than its initial value at D.C. superimposition or D.C. current when at  $\Delta t=40^{\circ}\text{C}$ , which is lower. ( $T_a=20^{\circ}\text{C}$ )

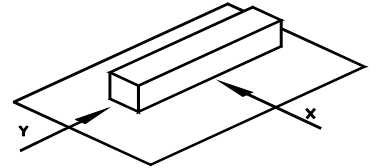
Note4. Inductance tolerance: M:  $\pm 20\%$  ; K:  $\pm 10\%$

Note5. Packaging: Taping ; Quantity: 3500 Pieces/reel

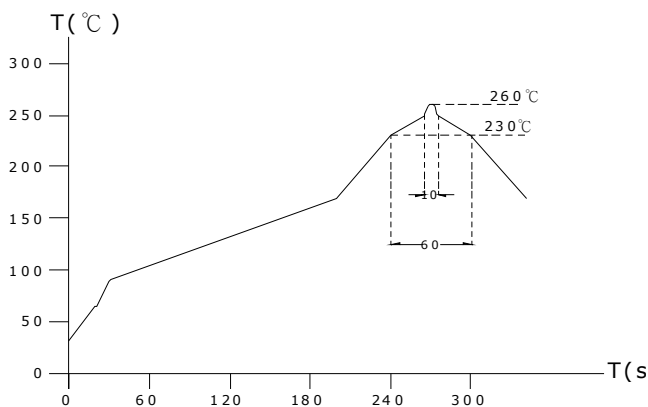


## GENERAL CHARACTERISTICS

- Operating temperature range: -40 TO + 105°C (Includes temperature when the coil is heated)
- External appearance: On visual inspection, the coil has no external defects.
- Terminal strength: After soldering. Between copper plate and terminals of coil. Push in two directions of X.Ywithstanding at below conditions.  
Terminal should not peel off. (refer to figure at right) 5. 0N 60 sec.
- Insulating resistance: Over 100MΩ at 100V D.C. between coil and core.
- Dielectric strength: No dielectric breakdown at 100V D.C. for 1 minute between coil and core.
- Temperature characteristics: Inductance coefficient  $(0\sim 2,000)\times 10^{-6}/^{\circ}\text{C}$  (-25~+80°C).
- Humidity characteristics(Moisture Resistance): Inductance deviation within  $\pm 5\%$ , after 96 hours in 90~95% relative humidity at  $40 \pm 2^{\circ}\text{C}$  and 1 hour drying under normal condition.
- Vibration resistance: Inductance deviation within  $\pm 5\%$ , after vibration for 1 hour. In each of three orientations at sweep vibration (10~55~10 Hz) with 1.5mm P-P amplitudes.
- Shock resistance: Inductance deviation within  $\pm 5\%$ , after being dropped once with 981m/s<sup>2</sup> (100G) shock attitude upon a rubber block method shock testing machine, in three different orientations.
- Resistance to Soldering Heat: 260°C, 10 seconds(See attached recommend reflow)
- Storage environment: Storage condition: Temperature Range: 10°C ~ 35°C (Generally: 21°C ~ 31°C) , Humidity Range: 50% ~ 80% RH (Generally: 65% ~ 75%) ; Transportation condition: Temperature Range: -35°C ~ 85°C , Humidity Range: 50% ~ 95% RH
- Use components within 12 months. If 12 months or more have elapsed, check solderability before use.
- Reflow profile recommend:



Lead-free heat endurance test



Lead-free the recommended reflow condition

