SMD POWER INDUCTOR – EPQH322520C SERIES



•<u>FEATURE</u>

An ISO 9001 Company

- 1. Low profile and small size
- 2. Low DC resistance
- <u>Applications</u>
- 1. Cell phone and other portable used
- Shape and Dimension

• <u>Schematics and Land Patterns(mm)</u>



A=3.20 \pm 0.3 mm ; B=2.50 \pm 0.2 mm ; C=2.50 \pm 0.3 mm ;D=2.00 \pm 0.20mm ; E=0.90mm REF.; F=1.30mm REF.

•<u>Specification</u>

Part Number	L(uH)	Inductance	SRF	DCR	IDC(mA)
		tolerance	(MHz) typ.	(Ω Max)	(Max)
EPQH322520C-1R0	1.0	М	96	0.117	1000
EPQH322520C-1R8	1.8	K,M	96	0.140	850
EPQH322520C-2R2	2.2	K,M	64	0.169	790
EPQH322520C-3R3	3.3	K,M	50	0.180	500
EPQH322520C-4R7	4.7	К , М	43	0.260	450
EPQH322520C-6R8	6.8	K,M	35	0.300	430
EPQH322520C-8R2	8.2	К , М	21	0.392	400
EPQH322520C-100	10	К , М	26	0.572	300
EPQH322520C-120	12	K,M	24	0.650	290
EPQH322520C-150	15	K,M	23	0.700	285
EPQH322520C-180	18	К , М	20	0.800	265
EPQH322520C-220	22	K , M	19	0.923	250
EPQH322520C-270	27	K , M	12	1.100	240
EPQH322520C-330	33	K , M	13	1.352	230

Specifications and dimensions subject to change.



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Part Number	L(uH)	Inductance	SRF(MHz) min.	DCR	IDC(mA)
		tolerance		(ΩMax)	(Max)
EPQH322520C-470	47	K , M	15	1.690	170
EPQH322520C-560	56	K , M	16	2.000	160
EPQH322520C-680	68	K , M	18	2.670	150
EPQH322520C-101	100	K , M	10	4.550	100
EPQH322520C-151	150	K , M	9	5.800	95
EPQH322520C-181	180	K , M	8.5	6.270	90
EPQH322520C-221	220	K , M	6.8	10.9	70
EPQH322520C-331	330	K , M	5.6	13.0	60
EPQH322520C-391	390	K , M	5.0	22.1	60
EPQH322520C-471	470	К [,] М	5.0	24.7	60

Note1. Measurement frequency of Inductance value : at 100KHz

Note2. Measurement ambient temperature of L, DCR and IDC : at $25^\circ\!\mathbb{C}$

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 $\Delta t=40^{\circ}C$, which is lower.(Ta=20 $^{\circ}C$)

Note4. Inductance tolerance: M: ±20% ; K: ±10%

Note5.Packaging: Taping ; Quantity:1000 Pieces/reel





GENERAL CHARACTERISTICS

- 1. Operating temperature range: -40 TO + 105°C (Includes temperature when the coil is heated)
- 2. External appearance: On visual inspection, the coil has no external defects.
- 3. Terminal strength: After soldering. Between copper plate and terminals of coil. Push in two directions of X.Y withstanding at below conditions.

Terminal should not peel off. (refer to figure at right) 5. 0N 60 sec.



- 4. Insulating resistance: Over 100MΩ at 100V D.C. between coil and core.
- 5. Dielectric strength: No dielectric breakdown at 100V D.C. for 1 minute between coil and core.
- Temperature characteristics: Inductance coefficient (0~2,000)x10-6/℃ (-25~+80℃ degree Celsius), inductance deviation within±5.0%, after 96 hours.
- 7. Humidity characteristics(Moisture Resistance): Inductance deviation within $\pm 5\%$, after 96 hours in 90~95% relative humidity at 40 $\pm 2^{\circ}$ C and 1 hour drying under normal condition.
- 8. Vibration resistance: Inductance deviation within ±5%, after vibration for 1 hour. In each of three orientations at sweep vibration (10~55~10 Hz) with 1.5mm P-P amplitudes.
- 9. Shock resistance: Inductance deviation within ±5%, after being dropped once with 981m/s2 (100G) shock attitude upon a rubber block method shock testing machine, in three different orientations.
- 10. Resistance to Soldering Heat: 260°C, 10 seconds(See attached recommend reflow)
- 11. Storage condition: Temperature Range: 0° C ~ 35° C ; -40° C ~ 105° C (after PCB) , Humidity Range: 50% ~ 70% RH
- 12. Use components within 12 months. If 12 months or more have elapsed, check solderability before use.
- 13. Reflow profile recommend:



Lead-free heat endurance test

Lead-free the recommended reflow condition

