

Features & Application

- Higher SRF than our other power inductors
- High inductance with tight tolerance
- Excellent current handling for a part this size

Core material Ferrite

Environmental RoHS compliant, halogen free

Terminations Silver-palladium-platinum-glass frit.

Other terminations available at additional cost.

Ambient temperature -40°C to +105°C with Irms current

Maximum part temperature +145°C (ambient + temp rise).

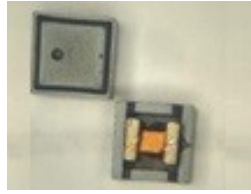
Storage temperature Component: -40°C to +145°C.

Tape and reel packaging: -40°C to +80°C

Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

Temperature Coefficient of Inductance (TCL) +25 to +125 ppm/°C

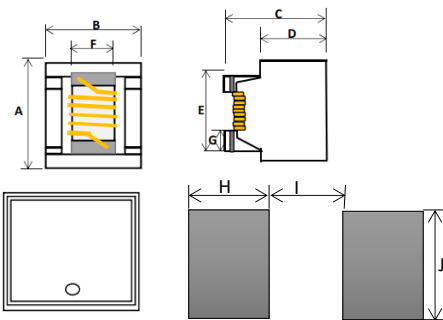
Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)



★ When ordering, please check part number

Part number	Inductance 100KHz (uH)	Inductance Tolerance	SRF (MHz) Min.	Q (min) 1MHz	RDC (Ω) Max	ISAT(A)			IRMS(A)	
						10% drop	20% drop	30% drop	20°C	40°C
HSW2520-1R0KT	1.0	K	387	35	0.05	3.50	3.90	4.20	1.40	2.00
HSW2520-1R5KT	1.5	K	276	35	0.06	2.70	3.20	3.50	1.40	2.00
HSW2520-1R8KT	1.8	K	253	35	0.09	2.30	2.70	3.00	0.98	1.40
HSW2520-2R2KT	2.2	K	228	36	0.10	2.40	2.80	3.10	1.20	1.70
HSW2520-2R7KT	2.7	K	207	38	0.14	1.60	2.00	2.30	1.00	1.40
HSW2520-3R3KT	3.3	K	199	26	0.84	1.50	1.60	1.60	0.51	0.67
HSW2520-3R9KT	3.6	K	185	38	0.26	1.50	1.80	2.00	0.82	1.10
HSW2520-4R7KT	4.7	K	160	38	0.35	1.30	1.60	1.70	0.70	0.95
HSW2520-5R6KT	5.6	K	150	38	0.36	1.50	1.70	1.80	0.66	0.87
HSW2520-6R8KT	6.8	K	120	38	0.58	1.30	1.50	1.60	0.45	0.76
HSW2520-100KT	10	K	105	38	0.92	0.84	1.00	1.10	0.40	0.59
HSW2520-150KT	15	K	35	38	1.15	0.81	0.87	0.90	0.36	0.51
HSW2520-220KT	22	K	26	40	1.40	0.67	0.75	0.79	0.33	0.44
HSW2520-330KT	33	K	20	45	1.61	0.53	0.61	0.68	0.30	0.42
HSW2520-390KT	39	K	16	45	1.85	0.49	0.56	0.60	0.28	0.39
HSW2520-470KT	47	K	19	45	2.50	0.47	0.52	0.54	0.23	0.31
HSW2520-680KT	68	K	12	45	3.80	0.38	0.42	0.45	0.21	0.26
HSW2520-820KT	82	K	9.0	45	4.30	0.33	0.38	0.42	0.18	0.26
HSW2520-101KT	100	K	7.0	45	5.80	0.35	0.38	0.39	0.16	0.20
HSW2520-121KT	120	K	7.0	50	6.30	0.30	0.33	0.35	0.14	0.20
HSW2520-151KT	150	K	5.8	50	7.50	0.27	0.30	0.33	0.13	0.18
HSW2520-221KT	220	K	5.0	55	10.00	0.21	0.24	0.27	0.13	0.17
HSW2520-331KT	330	K	3.8	55	11.50	0.19	0.21	0.23	0.11	0.15
HSW2520-471KT	470	K	3.1	55	16.30	0.14	0.17	0.19	0.10	0.13
HSW2520-561KT	560	K	2.8	55	18.10	0.13	0.15	0.17	0.09	0.12
HSW2520-681KT	680	K	2.5	55	24.00	0.11	0.15	0.17	0.07	0.11
HSW2520-821KT	820	K	1.5	45	26.00	0.10	0.12	0.13	0.07	0.10
HSW2520-102KT	1000	K	2.0	45	29.00	0.11	0.13	0.14	0.07	0.10

※Ambient temp -40 to 105 °C with (40°C rise) Irms current..



Dimensions	
A	3.60 ± 0.1
B	3.60 ± 0.1
C	2.30 ± 0.1
D	1.65 ± 0.1
E	2.50 ± 0.1
F	2.00 ± 0.1
G	0.55 ± 0.1
H	1.00 TYP
I	1.27 TYP
J	2.50 TYP
unit : mm	

Impedance/Inductance LCR Angilent 4263B/4287A

Resistance DC Chroma 16502

Current per winding that causes a 20°C rise from 25°C ambient

Electrical specifications at 25°C

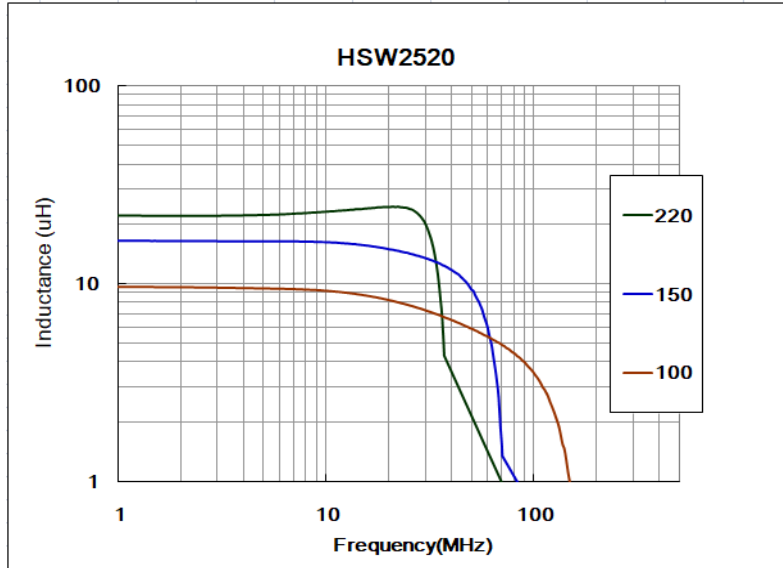
Weight 94.3 – 109.8 mg.

Packaging 750/7 # reel; Plastic tape: 12 mm wide.

Packaging will different, according to the various chip size.

Contact Us	
US	sales-us@bing-ri.com.tw
Taiwan	sales-tw@bing-ri.com.tw
China	sales-cn@bing-ri.com.tw
Japan	sales-jp@bing-ri.com.tw
Official Website :	
https://www.bing-ri.com.tw/	

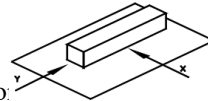
Typical Inductance vs Frequency



GENERAL CHARACTERISTICS

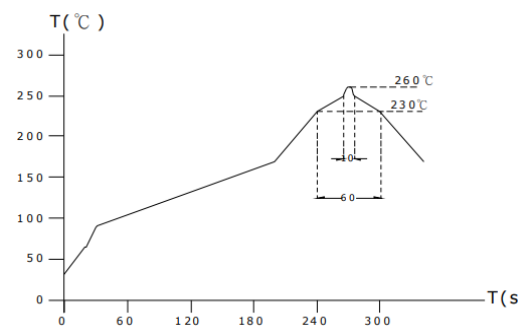
1. Operating temperature range: -40 TO + 125 °C (Includes temperature when the coil is heated)
2. External appearance: On visual inspection, the coil has no external defects.
3. Terminal strength: After soldering. Between copper plate and terminals of coil. Push in two directions of X.Y withstanding at below conditions.

Terminal should not peel off. (refer to figure at right) 0.5kg Min –2520



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
6. Temperature characteristics: Inductance coefficient $(0\sim 2,000) \times 10^{-6} / (^\circ\text{C} -25\sim +80)$. °C , inductance deviation within $\pm 5.0\%$, after 96 hours.
7. Humidity characteristics (Moisture Resistance): Inductance deviation within $\pm 5\%$, after 96 hours in 90~95% relative humidity at 40 ± 2 and 1 hour drying under normal condition.
8. 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.
9. Shock resistance: Inductance deviation within $\pm 5\%$, after being dropped once with 981m/s² (100G) shock attitude upon a rubber block method shock testing machine, in three different
10. Resistance to Soldering Heat: 260 , 10 seconds (See attached recommend reflow)
11. Storage environment: Storage condition: Temperature Range: 10 ~ 35 (Generally: 21 ~ 31) , Humidity Range: 50% ~ 80% RH (Generally: 65% ~ 75%) ; Transportation condition: Temperature Range: -35 ~ 85 , Humidity Range: 50% ~ 95% 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 en duran ce test



Lead-free the recommended reflow condition

