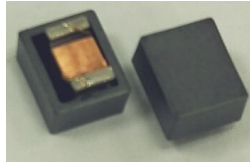


Features & Application

2020/1/1

- 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

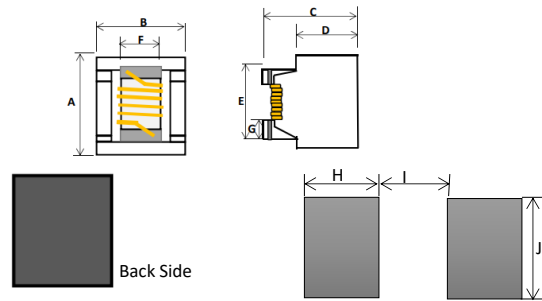
Temperature Coefficient of Inductance (TCL) +25 to +125 ppm/°C

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(mA)	IRMS(mA)
HSW4525-1R0KT	1.0	K	320	30	0.07	3100	2950
HSW4525-1R2KT	1.2	K	280	35	0.11	2800	2600
HSW4525-1R5KT	1.5	K	200	20	0.11	2100	2850
HSW4525-2R2KT	2.2	K	175	30	0.12	1800	2700
HSW4525-2R4KT	2.4	K	160	25	0.18	1900	2050
HSW4525-2R7KT	2.7	K	165	30	0.20	1400	2100
HSW4525-3R3KT	3.3	K	160	33	0.19	1400	1900
HSW4525-3R9KT	3.9	K	145	32	0.20	1300	1700
HSW4525-4R7KT	4.7	K	125	28	0.15	1000	1800
HSW4525-5R6KT	5.6	K	110	35	0.40	1000	1650
HSW4525-6R8KT	6.8	K	110	35	0.35	850	1450
HSW4525-100KT	10	K	90	35	0.55	710	1400
HSW4525-150KT	15	K	75	40	0.75	680	1150
HSW4525-220KT	22	K	15	45	0.85	600	855
HSW4525-330KT	33	K	10	45	1.10	540	820
HSW4525-390KT	39	K	10	45	1.10	500	710
HSW4525-470KT	47	K	8	45	1.20	390	645
HSW4525-680KT	68	K	14.2	45	1.80	260	650
HSW4525-101KT	82	K	4.5	45	2.50	260	520
HSW4525-151KT	100	K	3.4	40	3.80	220	475
HSW4525-221KT	120	K	3.0	45	5.40	180	390
HSW4525-271KT	150	K	2	35	6.50	150	350
HSW4525-331KT	220	K	3.0	45	6.80	150	310
HSW4525-391KT	330	K	2.6	35	7.60	140	310
HSW4525-471KT	470	K	2.1	35	8.70	130	280
HSW4525-561KT	560	K	1.6	20	11.20	110	280
HSW4525-681KT	680	K	1.9	25	12.70	100	250
HSW4525-821KT	820	K	1.45	25	16.80	90	210
HSW4525-102KT	1000	K	1.7	30	19.50	90	160

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



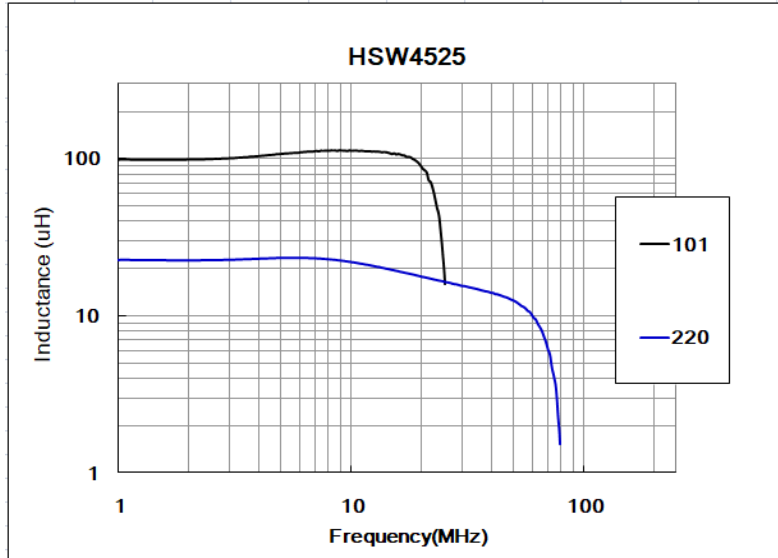
Impedance/Inductance LCR	Agilent 4263B/4287A
Resistance DC	Chroma 16502
Current per winding that causes a 20°C rise from 25°C ambient	
Electrical specifications at 25°	

Weight 261.9 – 351.4 mg  
 Packaging 500/7 # reel; Plastic tape: 16 mm wide.  
 Packaging will different, according to the various chip size. □

Dimensions	
A	5.70 ± 0.1
B	4.80 ± 0.1
C	3.75 ± 0.1
D	2.70 ± 0.1
E	4.20 ± 0.1
F	2.50 ± 0.1
G	0.70 ± 0.1
H	1.14 TYP
I	3.00 TYP
J	3.00 TYP
unit : mm	

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 :	
<a href="https://www.bing-ri.com.tw/">https://www.bing-ri.com.tw/</a>	

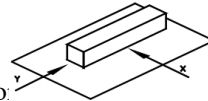
Typical Inductance vs Frequency



GENERAL CHARACTERISTICS

1. Operating temperature range:  $-40$  TO  $+125^{\circ}\text{C}$  (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) 0.8kg Min -4525



4. Insulating resistance: Over  $100\text{M}\Omega$  at  $100\text{V D.C.}$  between coil and core
5. Dielectric strength: No dielectric breakdown at  $100\text{V D.C.}$  for 1 minute between coil and core
6. Temperature characteristics: Inductance coefficient  $(0\sim 2,000)\times 10^{-6}/(^{\circ}\text{C } -25\sim +80)$ .  $^{\circ}\text{C}$ , inductance deviation within  $\pm 5.0\%$ , after 96 hours.
7. Humidity characteristics (Moisture Resistance): Inductance deviation within  $\pm 5\%$ , after 96 hours in  $90\sim 95\%$  relative humidity at  $40 \pm 2$  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 ( $10\sim 55\sim 10$  Hz) with  $1.5\text{mm P-P}$  amplitudes.
9. Shock resistance: Inductance deviation within  $\pm 5\%$ , after being dropped once with  $981\text{m/s}^2$  ( $100\text{G}$ ) 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:  $10 \sim 35$  (Generally:  $21 \sim 31$ ), Humidity Range:  $50\% \sim 80\%$  RH (Generally:  $65\% \sim 75\%$ ); Transportation condition: Temperature Range:  $-35 \sim 85$ , Humidity Range:  $50\% \sim 95\%$  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

