

**⊕ Feature**

- High current saturation.
- Magnetically Shielded Structure.
- Low profile construction and miniature size.

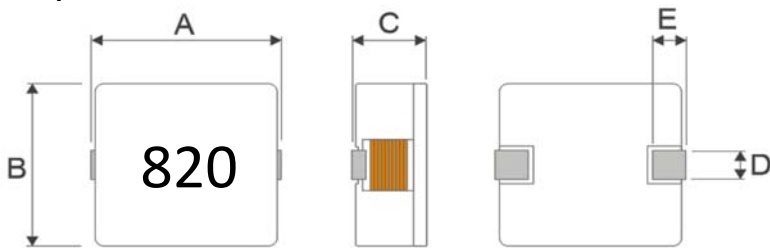
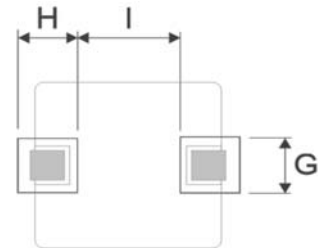
**⊕ Applications**

- DC to DC converters.
- Power line filtering.
- DVC/DSC/PDA, LCD display.

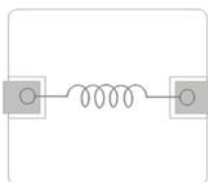
**⊕ Product Identification :**


Series name	Dimensions(LxWxH)		Internal code
SHC	0540	5.6*5.3*4.3mm	S = IRON
	2312	23*22*12.4mm	M = Mn-Zn

Inductance		Tolerance	
R13	0.13 $\mu$ H	M	20%
820	82 $\mu$ H	N	30%

**⊕ Shapes And Dimensions**

**⊕ Recommended PCB Pattern**


Part No.	Dimensions(mm)								
	A	B	C	D	E		G	H	I
SHC0540	5.60 $\pm 0.30$	5.30 $\pm 0.30$	4.30 Max.	1.00 $\pm 0.30$	1.20 $\pm 0.50$		2.00 Ref	2.20 Ref	2.00 Ref
SHC0730	7.00 $\pm 0.40$	6.90 $\pm 0.40$	3.30 Max.	1.20 $\pm 0.30$	1.80 $\pm 0.50$		2.20 Ref	2.70 Ref	2.40 Ref
SHC0740	7.00 $\pm 0.40$	6.90 $\pm 0.40$	4.00 Max.	1.20 $\pm 0.30$	1.80 $\pm 0.50$		2.20 Ref	2.70 Ref	2.40 Ref
SHC0750	7.00 $\pm 0.40$	6.90 $\pm 0.40$	5.00 Max.	1.20 $\pm 0.30$	1.80 $\pm 0.50$		2.20 Ref	2.70 Ref	2.40 Ref
SHC1030	10.50 $\pm 0.50$	10.20 $\pm 0.50$	3.10 Max.	2.00 $\pm 0.50$	2.00 $\pm 0.50$		4.00 Ref	3.50 Ref	3.80 Ref
SHC1040	10.50 $\pm 0.50$	10.20 $\pm 0.50$	4.20 Max.	2.00 $\pm 0.50$	2.00 $\pm 0.50$		4.00 Ref	3.50 Ref	3.80 Ref
SHC1050	10.50 $\pm 0.50$	10.20 $\pm 0.50$	5.00 Max.	2.00 $\pm 0.50$	2.00 $\pm 0.50$		4.00 Ref	3.50 Ref	3.80 Ref
SHC1335	13.00 $\pm 1.00$	12.80 $\pm 0.50$	3.50 Max.	2.50 $\pm 0.50$	3.00 $\pm 1.0$		5.00 Ref	4.50 Ref	6.00 Ref
SHC1350	13.00 $\pm 1.00$	12.80 $\pm 0.50$	5.00 Max.	2.50 $\pm 0.50$	3.00 $\pm 1.0$		5.00 Ref	4.50 Ref	6.00 Ref
SHC1365	13.00 $\pm 1.00$	12.80 $\pm 0.50$	6.50 Max.	3.00 $\pm 1.00$	3.00 $\pm 1.0$		5.00 Ref	4.50 Ref	6.00 Ref
SHC1892	18.30 $\pm 1.00$	18.20 $\pm 0.50$	9.20 Max.	3.50 $\pm 1.50$	4.50 $\pm 1.0$		6.00 Ref	6.00 Ref	7.30 Ref
SHC2312	23.00 $\pm 1.00$	22.00 $\pm 1.00$	12.40 Max.	3.50 $\pm 1.50$	5.50 $\pm 1.0$		6.00 Ref	7.00 Ref	9.00 Ref

**⊕ Equivalent Circuit Schematic :**

**⊕ Material List :**

No.	Location	Material
1	Core	IRON or Ferrite core
2	Wire	Grade1 P180, Flat Wire
3	Ink	White

1. Operating temperature -40°C ~ +125°C
2. Storage conditions -40°C ~ +125°C

**⊕ Electrical Characteristics :**

RSiN Part No. WURTH Part No.	Inductance ( $\mu$ H)		Isat (A) Typ	Irms (A) Typ	DCR (m $\Omega$ ) Max Typ		Test Frequency
	SHC0540S-R22M 744316022	0.22	$\pm 20\%$	25	20	1.38	
SHC0540S-R33M 744316033	0.33	$\pm 20\%$	20	18.5	1.93	1.75	100KHz/0.1V
SHC0540S-R47M 744316047	0.47	$\pm 20\%$	16	15	3.03	2.75	100KHz/0.1V
SHC0540S-R68M 744316068	0.68	$\pm 20\%$	13.5	12.75	4.4	4	100KHz/0.1V
SHC0540S-1R0M 744316100	1	$\pm 20\%$	11.5	11.5	5.23	4.75	100KHz/0.1V
SHC0540S-1R5M 744316150	1.5	$\pm 20\%$	9	9	8.97	8.15	100KHz/0.1V
SHC0540S-2R2M 744316220	2.2	$\pm 20\%$	7.5	7.5	12.43	11.3	100KHz/0.1V
SHC0540S-3R3M 744316330	3.3	$\pm 20\%$	5.8	5.75	20.35	18.5	100KHz/0.1V
SHC0540S-4R7M 744316470	4.7	$\pm 20\%$	4.7	4.6	26.95	24.5	100KHz/0.1V
SHC0540S-5R6M 744316560	5.6	$\pm 20\%$	4.6	4.5	31.35	28.5	100KHz/0.1V

**⊕ Electrical Characteristics :**

RSiN Part No. WURTH Part No.	Inductance ( $\mu$ H)		Isat (A) Typ	Irms (A) Typ	DCR (m $\Omega$ ) Max Typ		Test Frequency
	SHC0730S-R13M 744310013	0.13	$\pm 20\%$	48	22	1	
SHC0730S-R24M 744310024	0.24	$\pm 20\%$	40	18	1.98	1.8	100KHz/0.1V
SHC0730S-R52M 744310055	0.52	$\pm 20\%$	20	14	4.07	3.7	100KHz/0.1V
SHC0730S-R95M 744310095	0.95	$\pm 20\%$	13	11	6.82	6.2	100KHz/0.1V
SHC0730S-1R2M 744310115	1.15	$\pm 20\%$	13	8.5	9.46	8.6	100KHz/0.1V
SHC0730S-1R5M 744310150	1.5	$\pm 20\%$	12	7.5	13.97	12.7	100KHz/0.1V
SHC0730S-2R0M 744310200	2	$\pm 20\%$	9	6.5	15.62	14.2	100KHz/0.1V

**⊕ Electrical Characteristics :**

RSiN Part No. WURTH Part No.	Inductance ( $\mu$ H)		Isat (A) Typ	Irms (A) Typ	DCR (m $\Omega$ ) Max Typ		Test Frequency
	SHC0740S-R22M 744311022	0.22	$\pm 20\%$	32	21	1.21	
SHC0740S-R40M 744311047	0.4	$\pm 20\%$	25	19	2.04	1.85	100KHz/0.1V
SHC0740S-R68M 744311068	0.68	$\pm 20\%$	20	17	3.41	3.1	100KHz/0.1V
SHC0740S-1R0M 744311100	1	$\pm 20\%$	19	15	5.06	4.6	100KHz/0.1V
SHC0740S-1R5M 744311150	1.5	$\pm 20\%$	14	11	7.26	6.6	100KHz/0.1V
SHC0740S-2R2M 744311220	2.2	$\pm 20\%$	13	9	12.54	11.4	100KHz/0.1V
SHC0740S-3R3M 744311330	3.3	$\pm 20\%$	11	6.5	18.92	17.2	100KHz/0.1V
SHC0740S-4R7M 744311470	4.7	$\pm 20\%$	7	6	21.45	19.5	100KHz/0.1V

**⊕ Electrical Characteristics :**

RSiN Part No. WURTH Part No.	Inductance ( $\mu$ H)		Isat (A) Typ	Irms (A) Typ	DCR (m $\Omega$ ) Max Typ		Test Frequency
	SHC0750S-R24M 744314024	0.24	$\pm 20\%$	28	20	1.1	
SHC0750S-R47M 744314047	0.47	$\pm 20\%$	20	18	1.49	1.35	100KHz/0.1V
SHC0750S-R76M 744314076	0.76	$\pm 20\%$	15	15.5	2.48	2.25	100KHz/0.1V
SHC0750S-1R1M 744314110	1.1	$\pm 20\%$	13	15	3.47	3.15	100KHz/0.1V
SHC0750S-1R5M 744314150	1.5	$\pm 20\%$	11	13	4.73	4.3	100KHz/0.1V
SHC0750S-2R0M 744314200	2	$\pm 20\%$	9	11.5	6.44	5.85	100KHz/0.1V
SHC0750S-3R3M 744314330	3.3	$\pm 20\%$	8	9	9.9	9	100KHz/0.1V
SHC0750S-4R9M 744314490	4.9	$\pm 20\%$	6.5	6.5	15.95	14.5	100KHz/0.1V
SHC0750S-6R5M 744314650	6.5	$\pm 20\%$	6	6	23.65	21.5	100KHz/0.1V
SHC0750S-7R6M 744314760	7.6	$\pm 20\%$	4.8	4.2	33.22	30.2	100KHz/0.1V
SHC0750S-8R5M 744314850	8.5	$\pm 20\%$	4.5	4	35.75	32.5	100KHz/0.1V
SHC0750S-100M 744314101	10	$\pm 20\%$	4	3.5	36.3	33	100KHz/0.1V

**⊕ Electrical Characteristics :**

RSiN Part No. WURTH Part No.	Inductance ( $\mu$ H)		Isat (A) Typ	Irms (A) Typ	DCR (m $\Omega$ ) Max Typ		Test Frequency
	SHC1030S-R20M 744323020	0.2	$\pm 20\%$	50	22	0.9	
SHC1030S-R33M 744323033	0.33	$\pm 20\%$	36	18	2.39	2.17	100KHz/0.1V
SHC1030S-R56M 744323056	0.56	$\pm 20\%$	33	18	2.39	2.17	100KHz/0.1V
SHC1030S-R68M 744323068	0.68	$\pm 20\%$	21	14	5.27	4.79	100KHz/0.1V
SHC1030S-1R0M 744323100	1	$\pm 20\%$	21	14	5.27	4.79	100KHz/0.1V
SHC1030S-1R2M 744323120	1.2	$\pm 20\%$	15	12	7.26	6.6	100KHz/0.1V
SHC1030S-1R5M 744323150	1.5	$\pm 20\%$	18	12	7.26	6.6	100KHz/0.1V
SHC1030S-2R2M 744323220	2.2	$\pm 20\%$	15	9	12.52	11.38	100KHz/0.1V

**⊕ Electrical Characteristics :**

RSiN Part No. WURTH Part No.	Inductance ( $\mu$ H)		Isat (A) Typ	Irms (A) Typ	DCR (m $\Omega$ ) Max Typ		Test Frequency
	SHC1040S-R15M 744355215	0.15	$\pm 20\%$	60	25	0.64	
SHC1040S-R30M 744355230	0.3	$\pm 20\%$	35	22	1.21	1.1	100KHz/0.1V
SHC1040S-R56M 744355256	0.56	$\pm 20\%$	30	20	1.77	1.61	100KHz/0.1V
SHC1040S-1R0M 7443552100	1	$\pm 20\%$	30	20	1.77	1.61	100KHz/0.1V
SHC1040S-1R5M 7443552150	1.5	$\pm 20\%$	17	14	5.83	5.3	100KHz/0.1V

**⊕ Electrical Characteristics :**

RSiN Part No. WURTH Part No.	Inductance ( $\mu$ H)		Isat (A) Typ	Irms (A) Typ	DCR (m $\Omega$ ) Max Typ		Test Frequency
	SHC1040S-2R0M 7443552220	2	$\pm 20\%$	13	11	8.03	
SHC1040S-2R8M 7443552280	2.8	$\pm 20\%$	11	9.5	11.66	10.6	100KHz/0.1V
SHC1040S-4R3M 7443552430	4.3	$\pm 20\%$	8	8	15.51	14.1	100KHz/0.1V

**⊕ Electrical Characteristics :**

RSiN Part No. WURTH Part No.	Inductance ( $\mu$ H)		Isat (A) Typ	Irms (A) Typ	DCR (m $\Omega$ ) Max Typ		Test Frequency
	SHC1050S-R16M 744325016	0.16	$\pm 20\%$	58	25	0.56	
SHC1050S-R40M 744325040	0.4	$\pm 20\%$	37	24	0.74	0.67	100KHz/0.1V
SHC1050S-R72M 744325072	0.72	$\pm 20\%$	35	22	1.43	1.3	100KHz/0.1V
SHC1050S-1R2M 744325120	1.2	$\pm 20\%$	25	20	1.98	1.8	100KHz/0.1V
SHC1050S-1R8M 744325180	1.8	$\pm 20\%$	18	16	3.85	3.5	100KHz/0.1V
SHC1050S-2R4M 744325240	2.4	$\pm 20\%$	17	14	5.23	4.75	100KHz/0.1V
SHC1050S-3R3M 744325330	3.3	$\pm 20\%$	15	12	6.49	5.9	100KHz/0.1V
SHC1050S-4R2M 744325420	4.2	$\pm 20\%$	14	11	7.81	7.1	100KHz/0.1V
SHC1050S-5R5M 744325550	5.5	$\pm 20\%$	12	10	11.33	10.3	100KHz/0.1V
SHC1050S-6R5M 744325650	6.5	$\pm 20\%$	10	8.4	13.75	12.5	100KHz/0.1V
SHC1050S-7R8M 744325780	7.8	$\pm 20\%$	9.5	8	14.96	13.6	100KHz/0.1V
SHC1050S-100M 7443251000	10	$\pm 20\%$	8.5	7.2	17.93	16.3	100KHz/0.1V
SHC1050S-160M 7443251600	16	$\pm 20\%$	6.5	5	37.95	34.5	100KHz/0.1V

**⊕ Electrical Characteristics :**

RSiN Part No. WURTH Part No.	Inductance ( $\mu$ H)		Isat (A) Typ	Irms (A) Typ	DCR (m $\Omega$ ) Max Typ		Test Frequency
	SHC1335S-R25N 744313025	0.25	$\pm 30\%$	60	24	0.83	
SHC1335S-R68M 744313068	0.68	$\pm 20\%$	40	22	1.74	1.58	100KHz/0.1V
SHC1335S-1R2M 744313120	1.2	$\pm 20\%$	28	17	3.14	2.85	100KHz/0.1V
SHC1335S-1R8M 744313180	1.8	$\pm 20\%$	22	14	6.16	5.6	100KHz/0.1V
SHC1335S-2R2M 744313220	2.2	$\pm 20\%$	18	14	6.27	5.7	100KHz/0.1V
SHC1335S-3R3M 744313330	3.3	$\pm 20\%$	14	12	8.91	8.1	100KHz/0.1V

**⊕ Electrical Characteristics :**

RSiN Part No. WURTH Part No.	Inductance ( $\mu$ H)		Isat (A) Typ	Irms (A) Typ	DCR (m $\Omega$ ) Max Typ		Test Frequency
	SHC1350S-R19M 744355019	0.19	$\pm 20\%$	60	29	0.55	

**⊕ Electrical Characteristics :**

RSiN Part No. WURTH Part No.	Inductance ( $\mu$ H)		Isat (A) Typ	Irms (A) Typ	DCR (m $\Omega$ ) Max Typ		Test Frequency
	SHC1350S-R47M 744355047	0.47	$\pm 20\%$	50	26	0.99	
SHC1350S-R90M 744355090	0.9	$\pm 20\%$	28	24	1.76	1.6	100KHz/0.1V
SHC1350S-1R4M 7443550140	1.4	$\pm 20\%$	26	22	2.64	2.4	100KHz/0.1V
SHC1350S-2R3M 7443550230	2.3	$\pm 20\%$	17	17.5	4.07	3.7	100KHz/0.1V
SHC1350S-3R2M 7443550320	3.2	$\pm 20\%$	15	16	5.83	5.3	100KHz/0.1V
SHC1350S-4R8M 7443550480	4.8	$\pm 20\%$	13	11	11.55	10.5	100KHz/0.1V
SHC1350S-6R0M 7443550600	6	$\pm 20\%$	11.5	9.5	14.85	13.5	100KHz/0.1V
SHC1350S-8R2M 7443550820	8.2	$\pm 20\%$	11	10	12.76	11.6	100KHz/0.1V
SHC1350S-100M 7443550101	10	$\pm 20\%$	10	8.5	15.51	14.1	100KHz/0.1V

**⊕ Electrical Characteristics :**

RSiN Part No. WURTH Part No.	Inductance ( $\mu$ H)		Isat (A) Typ	Irms (A) Typ	DCR (m $\Omega$ ) Max Typ		Test Frequency
	SHC1365S-R22M 744355122	0.2	$\pm 20\%$	65	32	0.39	
SHC1365S-R47M 744355147	0.47	$\pm 20\%$	50	30	0.74	0.67	100KHz/0.1V
SHC1365S-R82M 744355182	0.82	$\pm 20\%$	35	27	0.99	0.9	100KHz/0.1V
SHC1365S-1R3M 7443551130	1.3	$\pm 20\%$	25	25	1.98	1.8	100KHz/0.1V
SHC1365S-2R0M 7443551200	2	$\pm 20\%$	22	23	2.86	2.6	100KHz/0.1V
SHC1365S-2R8M 7443551280	2.8	$\pm 20\%$	17.5	20	3.63	3.3	100KHz/0.1V
SHC1365S-3R7M 7443551370	3.7	$\pm 20\%$	16	17	5.39	4.9	100KHz/0.1V
SHC1365S-4R7M 7443551470	4.7	$\pm 20\%$	15	13	7.7	7	100KHz/0.1V
SHC1365S-6R0M 7443551600	6	$\pm 20\%$	14	12	9.24	8.4	100KHz/0.1V
SHC1365S-7R3M 7443551730	7.3	$\pm 20\%$	12	13	6.49	5.9	100KHz/0.1V
SHC1365S-9R2M 7443551920	9.2	$\pm 20\%$	10.5	12	8.58	7.8	100KHz/0.1V
SHC1365S-110M 7443551111	11.3	$\pm 20\%$	9.5	11	10	9.1	100KHz/0.1V
SHC1365S-130M 7443551131	13	$\pm 20\%$	9	10	12.32	11.2	100KHz/0.1V
SHC1365S-150M 7443551151	15.4	$\pm 20\%$	8	9	16.28	14.8	100KHz/0.1V
SHC1365S-220M 7443551221	22	$\pm 20\%$	6.5	6	27.17	24.7	100KHz/0.1V

**⊕ Electrical Characteristics :**

RSiN Part No. WURTH Part No.	Inductance ( $\mu$ H)		Isat (A) Typ	Irms (A) Typ	DCR (m $\Omega$ ) Max Typ		Test Frequency
	SHC1892S-R82M 7443556082	0.82	$\pm 20\%$	65	41.5	0.58	

**⊕ Electrical Characteristics :**

RSiN Part No. WURTH Part No.	Inductance ( $\mu$ H)		Isat (A) Typ	Irms (A) Typ	DCR (m $\Omega$ ) Max Typ		Test Frequency
	SHC1892S-1R3M 7443556130	1.3	$\pm 20\%$	62	34.5	1.02	
SHC1892S-1R9M 7443556190	1.9	$\pm 20\%$	52	32.5	1.3	1.2	100KHz/0.1V
SHC1892S-2R6M 7443556260	2.6	$\pm 20\%$	50	31.5	1.71	1.58	100KHz/0.1V
SHC1892S-3R5M 7443556350	3.5	$\pm 20\%$	37	22.5	3.35	3.1	100KHz/0.1V
SHC1892S-4R5M 7443556450	4.5	$\pm 20\%$	37	20.5	3.67	3.4	100KHz/0.1V
SHC1892S-5R6M 7443556560	5.6	$\pm 20\%$	33	19	4	3.7	100KHz/0.1V
SHC1892S-6R8M 7443556680	6.8	$\pm 20\%$	27	18.5	4.43	4.1	100KHz/0.1V
SHC1892S-100M 74435561100	10	$\pm 20\%$	21.5	15	7.45	6.9	100KHz/0.1V
SHC1892M-100M 74435571100	10	$\pm 20\%$	18.5	16.5	7.67	7.1	100KHz/0.1V
SHC1892M-150M 74435571500	15	$\pm 20\%$	14	14	10.05	9.3	100KHz/0.1V
SHC1892M-220M 74435572000	22	$\pm 20\%$	11	11	15.77	14.6	100KHz/0.1V
SHC1892M-330M 74435573300	33	$\pm 20\%$	9	8.5	24.41	22.6	100KHz/0.1V
SHC1892M-470M 74435574700	47	$\pm 20\%$	7	6.8	36.72	34	100KHz/0.1V

**⊕ Electrical Characteristics :**

RSiN Part No. WURTH Part No.	Inductance ( $\mu$ H)		Isat (A) Typ	Irms (A) Typ	DCR (m $\Omega$ ) Max Typ		Test Frequency
	SHC2312S-3R3M 74435580330	3.3	$\pm 20\%$	45	29	1.87	
SHC2312S-6R8M 74435580680	6.8	$\pm 20\%$	31	28.5	2.31	2.1	100KHz/0.1V
SHC2312S-8R2M 74435580820	8.2	$\pm 20\%$	30	25.5	2.97	2.7	100KHz/0.1V
SHC2312S-100M 74435581000	10	$\pm 20\%$	26	21	3.74	3.4	100KHz/0.1V
SHC2312S-120M 74435581200	12	$\pm 20\%$	25	19	4.73	4.3	100KHz/0.1V
SHC2312S-220M 744355822000	22	$\pm 20\%$	18	15	7.7	7	100KHz/0.1V
SHC2312S-330M 74435583300	33	$\pm 20\%$	15	11.5	14.52	13.2	100KHz/0.1V
SHC2312S-470M 74435584700	47	$\pm 20\%$	12	9	21.12	19.2	100KHz/0.1V
SHC2312S-680M 74435586800	68	$\pm 20\%$	9.5	7.5	30.03	27.3	100KHz/0.1V
SHC2312S-820M 74435588200	82	$\pm 20\%$	8.5	7	33.44	30.4	100KHz/0.1V

Note : Specifications which provide more details for the proper and safe use of the described product

All test data is referenced to 25°C ambient.

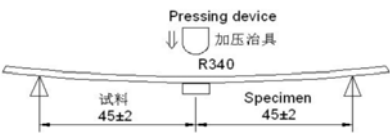
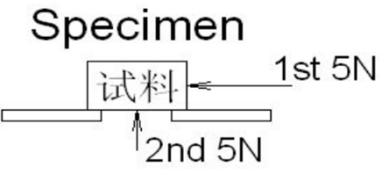
Isat : DC Saturation Current that will cause initial inductance to drop approximately 30% max.

Irms : DC Current that will cause an approximate  $\Delta T$  of 50 °C

Test Instrument : LCR(CH1062/HP4284A) · DCR(TH2511/CH502BC) · IDC(CH1320)

Operating temperature range is -40°C to 125°C.

**⊕ General Characteristics**

項目 Item	Conditions	Specification
温度特性 Temperature drift	在温度-40 ~ + 125°C之间测试。 To be measured in the range of -40°C to 125°C.	Inductance temperature coefficient 2000 ppm/°C or less
保存温度范围 Storage Temperature	在包装的状态下。 With taping.	- 40°C ~ + 125°C
使用温度范围 Operating Temperature	包括制品的发热温度。 Including self temperature rise.	- 40°C ~ + 125°C
弯曲测试 Bending test	<p>试件焊接在基板上，按箭头方向以大约0.5mm/秒的速度加压，直到基板变形幅度到3mm 保持30 秒。</p> <p>Apply pressure gradually in the direction of the arrow at a rate of about 0.5mm/s until bent depth reaches 3mm and hold for 30±5s.</p>  <p>基板Board: 40*100mm 厚Thickness: 1.0mm</p>	Change from an initial value L : within±10%
固着强度 Adhesion strength	<p>按箭头方向用R0.5 的加压棒在试件中施加一定的静力并保持60±5秒。</p> <p>A static load using a R0.5 pressing tool shall be applied the arrow and to the body of the specimen in the direction of the arrow and shall be hold for 60±5s. Measure after removing pressure.</p> 	Change from an initial value L : within±10%

耐振性 Vibration	<p>振动频率10 ~ 55 ~ 10Hz, 振幅1.5mm, 分X,Y,Z 方向各振动1 小时 ( 共3 小时 ) 。</p> <p>The specimen shall be subjected to a vibration of 1.5mm amplitude, sweep frequency 10~55Hz (10Hz to 55Hz to 10Hz in a period of one minute) for 1 h in each of 3(X,Y,Z) axes.</p>	Change from an initial value L : within±10%
耐冲击性 Mechanical shock	<p>利用橡胶块式落下冲击试验机，分别在3 个互相垂直的方向以981m/S<sup>2</sup> 的冲击加速度落下。</p> <p>Peak acceleration: 981 m/S<sup>2</sup> Duration of pulse: 6ms 3 times in each of 3(X,Y,Z)axes. The specimen must be fixed on test board. Three successive shock shall be applied in the perpendicular direction of each surface of the specimen.</p>	Change from an initial value L : within±10%
自然落下试验 Free fall test	<p>试件安装在基板上，并固定在重500 克的盒中，由1 米高自由落体，3 个互相垂直的方向各3 次。</p> <p>The specimen must be fixed on test board. It must be equipped with instruments of which weight is 500g. Then it shall be fallen freely from 1m height to rigid wood 3 times in each of three axes.</p>	Change from an initial value L : within±10%
焊锡附着性 Solder ability	<p>试验品的电极深布松香后，在5 ~ 10 秒内焊锡，焊锡槽温度245±5℃，时间：3±0.5 秒。</p> <p>Terminals shall be immersed for 5 to 10 seconds in flux at room temperature. Dip sample into solder bath containing molten solder at 245±5°C for 3±0.5 seconds.</p>	90%以上的面积要被覆盖。 New solder shall cover 90% minimum of the surface immersed.
耐电压 Dielectric strength	<p>在电极与磁材之间加入直流电压100V 通电时间1 分钟。</p> <p>100V DC shall be applied for 60s between the terminal and the core.</p>	没有损害。 Without damage.



<p>焊锡耐热性 Resistance to soldering heat</p>	<p>试验方法Test method 热风炉焊接Reflow soldering method 预热Preheat 150~180°C 90±30s 峰值温度Peak temp 250(+ 5,-0)°C (230°Cmin , 30 ±10s) 试验板的厚度0.8mm 上按上面条件通过两次热风炉。</p> <p>The specimen shall be subjected to the reflow process under the above condition 2 times.Test board shall be 0.8mm thick. Base material shall be glass epoxy resin.</p> <p>测定Measurement 常温常湿中放置于1 小时以上测试。 The specimen shall be stored at standard atmospheric conditions for 1 h in prior to the measurement.</p>	<p>Change from an initial value L : within±10%</p>
<p>绝缘抵抗 Insulation resistance</p>	<p>在电极与磁材之间加入直流电压100V。</p> <p>100V DC shall be applied between the terminal and the core.</p>	<p>100mΩ 以上 100mΩ or more.</p>
<p>耐寒性 Low temperature</p>	<p>在温度-40±3°C中放置500±12 小时后，常温常湿中放置1 小时以上2 小时以内测试。</p> <p>The specimen shall be stored at a temperature of -40±3°C for 500 ±12h. Then it shall be stabilized under standard atmospheric conditions for 1 h before measurement Measurement shall be made within 1h.</p>	<p>Change from an initial value L : within±10%</p>
<p>耐热性 Dry heat</p>	<p>在温度125±2°C中放置500±12 小时后，常温常湿中放置1 小时以上2 小时以内测试。</p> <p>The specimen shall be stored at a temperature of 125 ± 2°C for 500± 12h. Then it shall be stabilized under standard atmospheric conditions for 1 h before measurement. Measurement shall be made within 1h.</p>	<p>Change from an initial value L : within±10%</p>

耐湿性 Dump heat	<p>在温度<math>60\pm 2^{\circ}\text{C}</math>，湿度90~95%中放置<math>500\pm 12</math>小时后，常温常湿中放置1小时以上2小时以内测试。</p> <p>The specimen shall be stored at a temperature of <math>60\pm 2^{\circ}\text{C}</math> with relative humidity of 90 ~ 95% for <math>500 \pm 2\text{h}</math>. Then it shall be stabilized under standard atmospheric conditions for 1 h before measurement. Measurement shall be made within 1h.</p>	Change from an initial value L : within $\pm 10\%$
温度循环 Temperature cycle	<p>以温度<math>-40^{\circ}\text{C}</math>中放置30分钟，在<math>125^{\circ}\text{C}</math>放置30分钟，中间转换时间不超过2分钟为一个循环。完成500个循环后，常温常湿中放置1小时以上2小时以内测试。</p> <p>The specimen shall be subjected to 500 continuous cycles of temperature change of <math>-40^{\circ}\text{C}</math> for 30 min and <math>125^{\circ}\text{C}</math> for 30 min with the transit period of 2min or less. Then it shall be stabilized under standard atmospheric conditions for 1 h before measurement. Measurement shall be made within 1h.</p>	Change from an initial value L : within $\pm 10\%$

**标准状态Standard atmospheric conditions**

Unless otherwise specified, the standard range of atmospheric conditions in making measurements and test as follows;

Ambient temperature :  $5^{\circ}\text{C}$  to  $35^{\circ}\text{C}$ , Relative humidity: 45% to 85%, Air pressure: 86kPa to 106kPa

If more strict measurement is required, measurement shall be made within following limits;

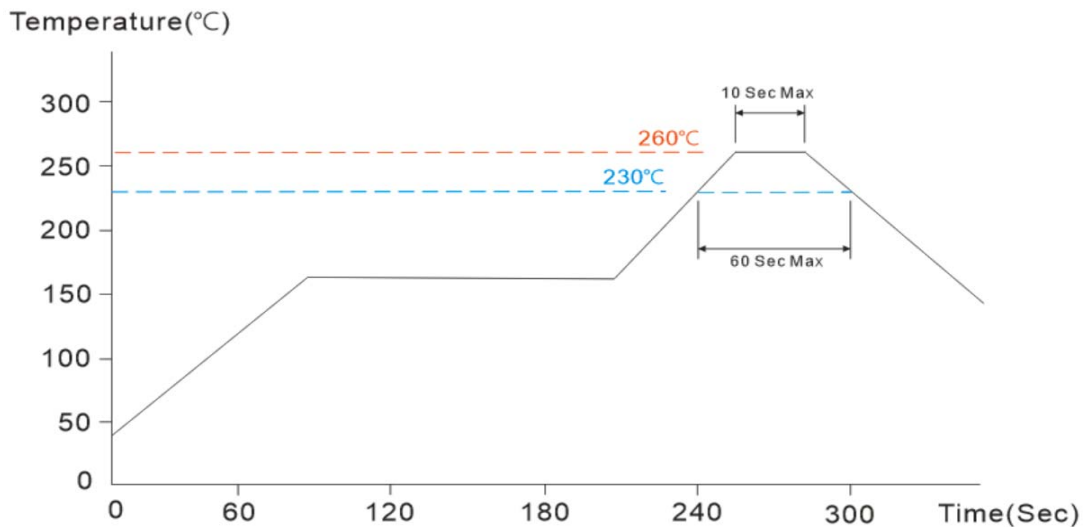
Ambient temperature :  $20\pm 2^{\circ}\text{C}$ , Relative humidity:  $65\pm 5\%$ , Air pressure: 86kPa to 106kPa

**禁用物质Prohibited Substances**

我公司保证我司的产品和生产过程符合“RoHS 规则”，所有产品中使用的材料均是化学物质生产规则中登记的材料。

We confirm that our products and our production process accord with "rule of RoHS". All materials used in this product are registered material under the law concerning the examination and Regulation of Manufacture of Chemical Substances.

### ⊕ Reflow Soldering Heat Endurance

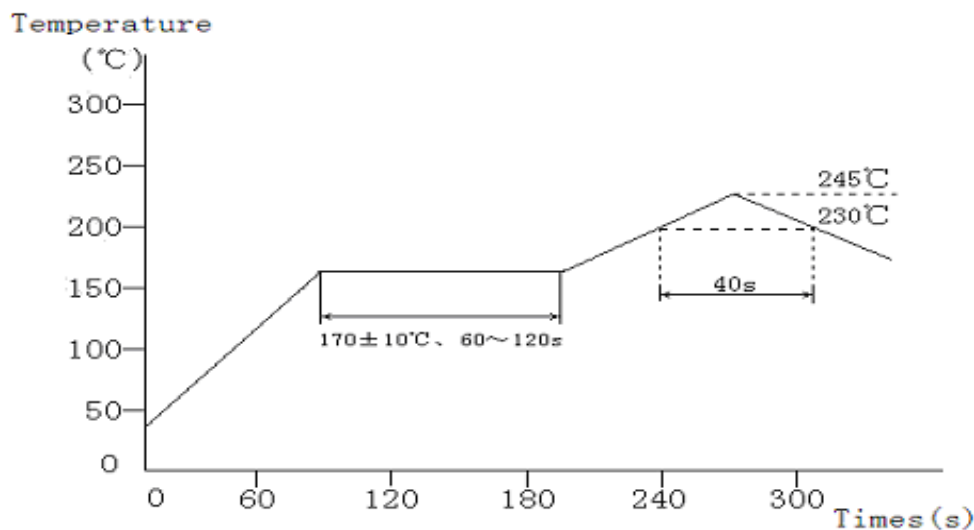


No mechanical and electrical defects are found after testing based on the above profile and keeping under the conditions of room temperature and humidity for 2 hours.

Twice reflow test is acceptable with the test interval remaining 1 hour under the normal conditions.

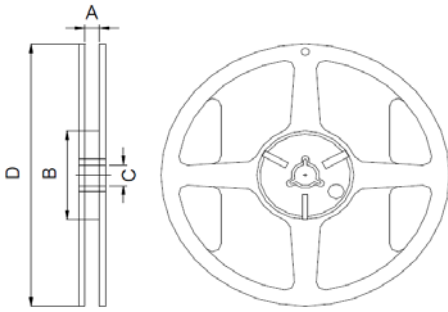
The reflow test profile may vary with the testing instruments.

### ⊕ Recommended Reflow Conditions

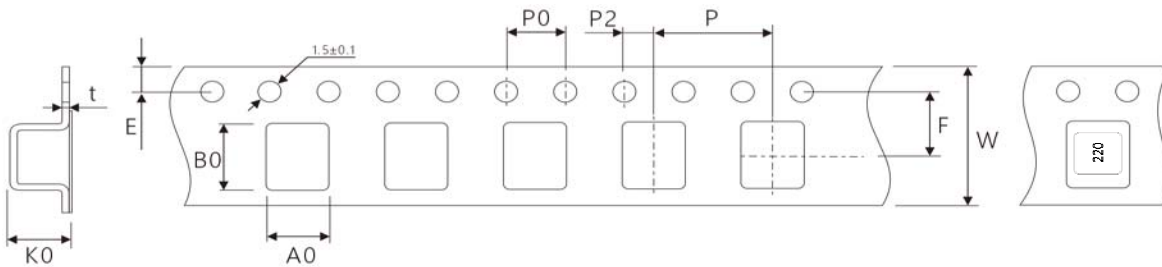


The recommended reflow profile is based on the testing instruments used. Solder ability will depend on the testing equipments, reflow conditions, testing method, etc. So it is necessary to make a confirmation of them when the reflow conditions are set up.

However halogen lamp shall be used, side heat will be beyond range of resistance heat, so we can't recommend it.

**⊕Reel Dimension(m/m)**


Item	A	B	C	D	Applicable Models
13"x12	12.5±1	100±1	13±1	330±1	SHC0540
13"x16	16.5±1	100±1	13±1	330±1	SHC0730、SHC0740、SHC0750
13"x24	24.5±1	100±1	13±1	330±1	SHC1030、SHC1040、SHC1050、SHC1335、SHC1350、SHC1365
13"x32	32.5±1	100±1	13±1	330±1	SHC1892
13"x44	44.5±1	100±1	13±1	330±1	SHC2312

**⊕Taping Dimension(m/m)**


Item	W	Ao	Bo	Ko	E	F	P	P0	P2	t
SHC0540	12±0.3	5.6±0.1	6.0±0.1	4.2±0.1	1.75±0.1	5.5±0.1	8.0±0.1	4.0±0.1	2.0±0.1	0.4±0.05
SHC0730	16±0.3	7.2±0.1	7.8±0.1	3.5±0.1	1.75±0.1	7.5±0.1	12.0±0.1	4.0±0.1	2.0±0.1	0.4±0.05
SHC0740	16±0.3	7.2±0.1	7.8±0.1	4.2±0.1	1.75±0.1	7.5±0.1	12.0±0.1	4.0±0.1	2.0±0.1	0.4±0.05
SHC0750	16±0.3	7.2±0.1	7.8±0.1	5.2±0.1	1.75±0.1	7.5±0.1	12.0±0.1	4.0±0.1	2.0±0.1	0.4±0.05
SHC1030	24±0.3	10.8±0.1	11.3±0.1	3.5±0.1	1.75±0.1	11.5±0.1	16.0±0.1	4.0±0.1	2.0±0.1	0.4±0.05
SHC1040	24±0.3	10.8±0.1	11.3±0.1	4.2±0.1	1.75±0.1	11.5±0.1	16.0±0.1	4.0±0.1	2.0±0.1	0.4±0.05
SHC1050	24±0.3	10.8±0.1	11.3±0.1	5.2±0.1	1.75±0.1	11.5±0.1	16.0±0.1	4.0±0.1	2.0±0.1	0.4±0.05
SHC1335	24±0.3	13.5±0.1	14.0±0.1	3.7±0.1	1.75±0.1	11.5±0.1	16.0±0.1	4.0±0.1	2.0±0.1	0.4±0.05
SHC1350	24±0.3	13.5±0.1	14.0±0.1	5.2±0.1	1.75±0.1	11.5±0.1	16.0±0.1	4.0±0.1	2.0±0.1	0.4±0.05
SHC1365	24±0.3	13.5±0.1	14.0±0.1	6.7±0.1	1.75±0.1	11.5±0.1	16.0±0.1	4.0±0.1	2.0±0.1	0.4±0.05
SHC1892	32±0.3	18.8±0.1	19.4±0.1	9.5±0.1	1.75±0.1	14.2±0.1	24.0±0.1	4.0±0.1	2.0±0.1	0.4±0.05
SHC2312	44±0.3	23.1±0.1	23.6±0.1	12.8±0.1	1.75±0.1	20.2±0.1	32.0±0.1	4.0±0.1	2.0±0.1	0.4±0.05

**⊕ Packaging Carton**

Reel Packing Unit	Inner Box Packing Unit	Carton Packing Unit	Applicable Models
1,500 PCS / Reel	3,000 PCS / Box	6,000 PCS / Box	SHC0540、SHC0730
1,000 PCS / Reel	2,000 PCS / Box	4,000 PCS / Box	SHC0740、SHC0750、SHC1030、SHC1040
800 PCS / Reel	1,600 PCS / Box	3,200 PCS / Box	SHC1050
600 PCS / Reel	1,200 PCS / Box	2,400 PCS / Box	SHC1335
500 PCS / Reel	1,000 PCS / Box	2,000 PCS / Box	SHC1350、SHC1365
250 PCS / Reel	500 PCS / Box	1,000 PCS / Box	SHC1892
120 PCS / Reel	240 PCS / Box	480 PCS / Box	SHC2312