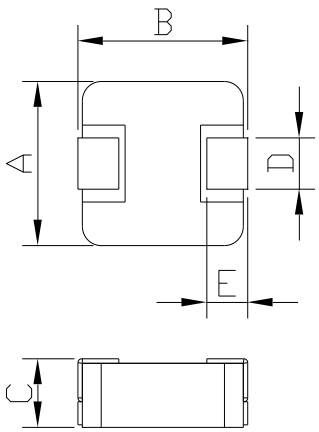
Version: A1.0

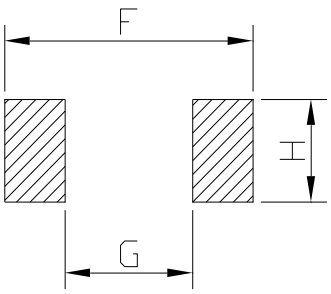
COIL SPECIFICATION

RoHS COMPLIANT

ITEM P/N	ESPA-1265-SERIES	TEST INSTRUMENT	Zentech-3305 / Zentech502BC
PRODUCT	SMD Inductor	TEST FREQUENCY	100 kHz / 1.0V

PACKING DIMENSIONS (mm)





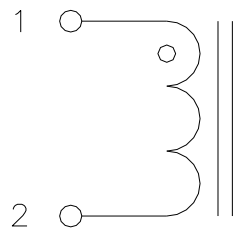
RECOMMANED
LAND PATTERN

1265 1R0M	Dimensions
A	12.8 ± 0.3
B	13.5 ± 0.5
C	6.5 MAX
D	3.5 ± 0.5
E	2.5 ± 0.5
F	15 Typ
G	6 Typ
H	5 Typ

EXPLANATION OF PART NUMBERS

1	2	3	4	5	6	7	8	9	10	11	12
E	S	P	A	- 1	2	6	5	- 1	R	0	M
Serial Codes					Size				Inductance Code		

CONNECTIONS



◎ Inductor Contents ONE (1) Set(s) of Coil

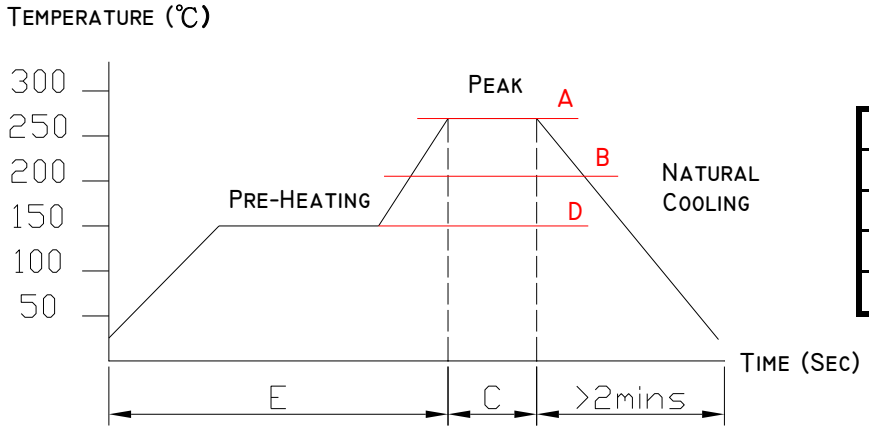
◎ DC/AC Currnet Shall Be Introduced By Any One of Two Pads

MARKING

◎ XXX = Inductance Code

◎ Example: 1.0uH = 1R0

RECOMMENDED SOLDERING TEMP. GRAPH



A	260℃
B	230℃
C	10 Sec
D	150℃
E	60~240 Sec

HUNG TRON

HUNGTRON TECHNOLOGY Co.,Ltd.

Version: A1.0

CHARACTERISTICS

RoHS COMPLIANT

ITEM P/N	ESPA-1265-SERIES	TEST INSTRUMENT	Zentech-3305 / Zentech502BC
PRODUCT	SMD Inductor	TEST FREQUENCY	100 kHz / 1.0V

ELECTRICAL CHARACTERISTICS

P/N	L0 Inductance μH ±20% @0A	DCR (mΩ)		Heat Rating Current	Saturation Current
		[Typical]	[Max]	Idc (AMP) Typical	Isat (AMP) Typical
ESPA-1265-R10M	0.10	0.47	0.50	60	80
ESPA-1265-R15M	0.15	0.53	0.60	55	80
ESPA-1265-R22M	0.22	0.63	0.70	53	80
ESPA-1265-R30M	0.30	0.70	0.80	48	72
ESPA-1265-R33M	0.33	0.83	0.90	46	65
ESPA-1265-R40M	0.40	0.90	1.00	44	64
ESPA-1265-R47M	0.47	1.00	1.20	41	63
ESPA-1265-R56M	0.56	1.20	1.40	37	62
ESPA-1265-R68M	0.68	1.40	1.60	35	60
ESPA-1265-R82M	0.82	1.60	1.90	33	50
ESPA-1265-1R0M	1.0	1.70	2.00	32	49
ESPA-1265-1R2M	1.2	2.10	2.50	30	48
ESPA-1265-1R5M	1.5	2.50	3.00	27	45
ESPA-1265-1R8M	1.8	2.80	3.20	24	41
ESPA-1265-2R2M	2.2	3.50	4.20	22	40
ESPA-1265-2R8M	2.8	4.20	4.80	20	25
ESPA-1265-3R3M	3.3	5.70	6.80	18	35
ESPA-1265-4R2M	4.2	5.80	7.20	11	28
ESPA-1265-4R7M	4.7	9.30	11.2	13.5	30
ESPA-1265-5R6M	5.6	11.8	12.8	12	26.5
ESPA-1265-6R8M	6.8	13.1	14.0	11.5	16.5
ESPA-1265-8R2M	8.2	14.5	15.5	10.5	16
ESPA-1265-100M	10	15.8	16.8	10	15.5
ESPA-1265-120M	12	23.0	26.0	9	14
ESPA-1265-150M	15	25.0	29.0	6	9
ESPA-1265-220M	22	34.0	39.5	5	7.5
ESPA-1265-330M	33	55.0	65.0	4	6
ESPA-1265-470M	47	80.0	92.0	3	5
ESPA-1265-680M	68	122.0	134.0	2	3.5

- All test Data is referenced to 25℃ ambient
- Typical Heat Rating DC Current would cause an approximately △T of 40℃
- Typical Saturation DC Current would cause Lo to drop approximately 30%
- Operation Temperature Range : -55℃ ~ 125℃
- The Part temperature (ambient + △T) should not exceed 125℃ under worst case operating conditions.
- Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all effect the part temperature. Part temperature should be verified in the end application.

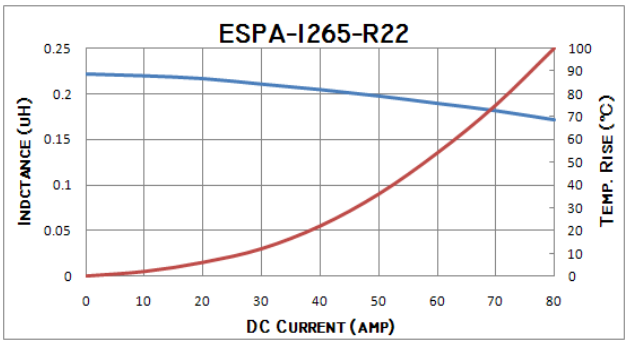
Version: A1.0

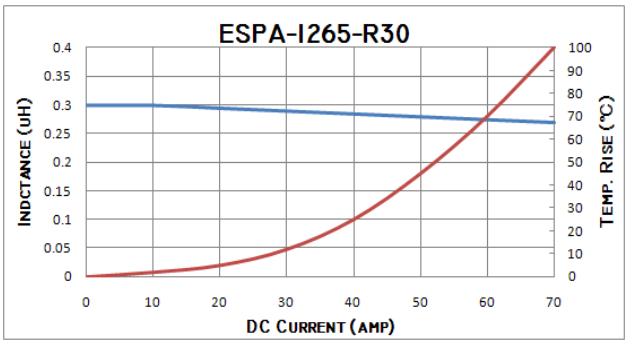
CHARACTERISTICS

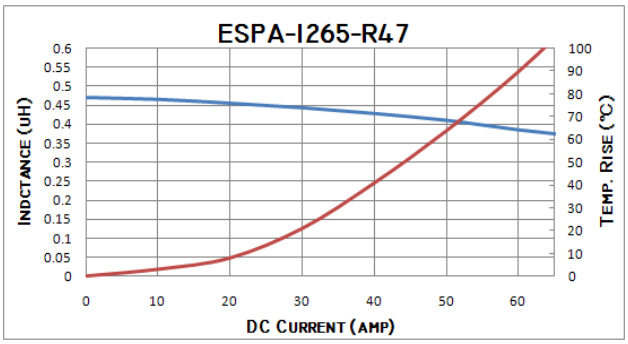
RoHS COMPLIANT

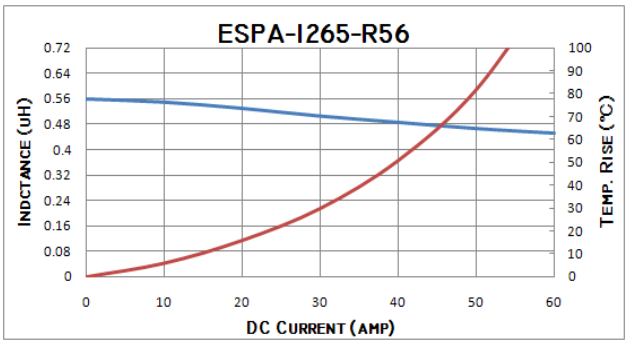
ITEM P/N	ESPA-1265-SERIES	TEST INSTRUMENT	Zentech-3305 / Zentech502BC
PRODUCT	SMD Inductor	TEST FREQUENCY	100 kHz / 1.0V

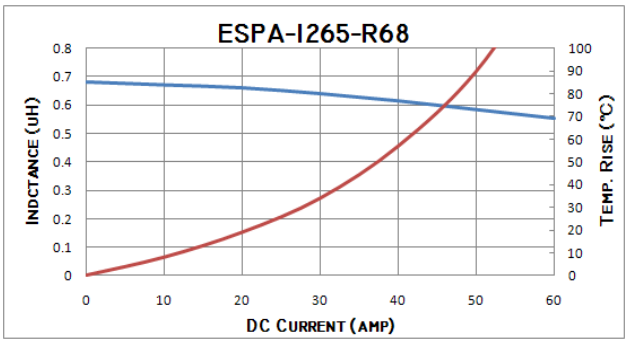
PERFORMANCE CURVES

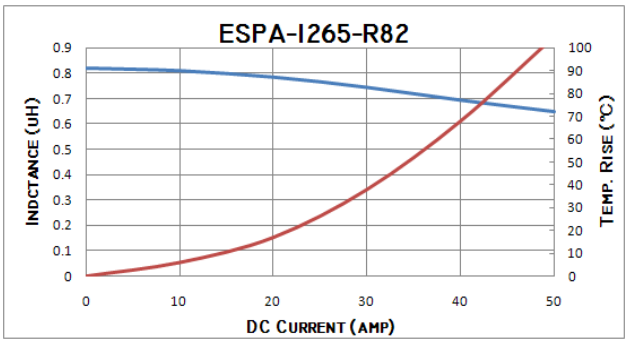


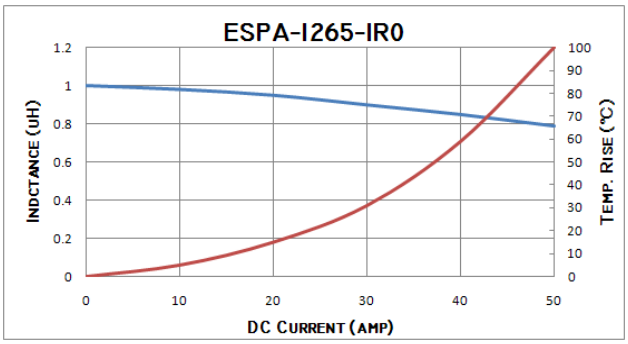


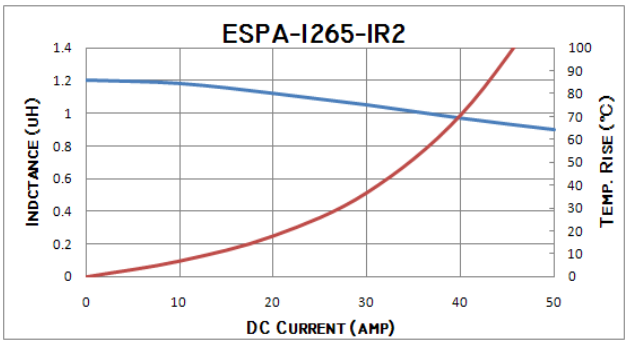












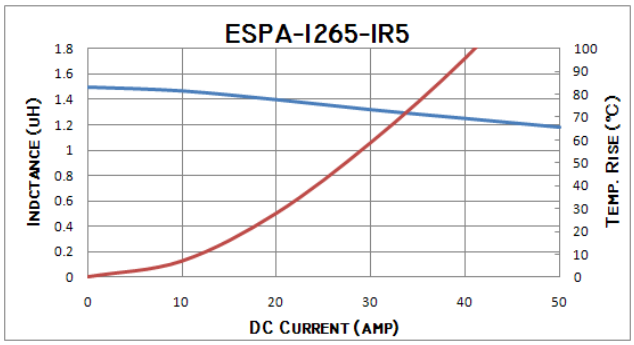
Version: A1.0

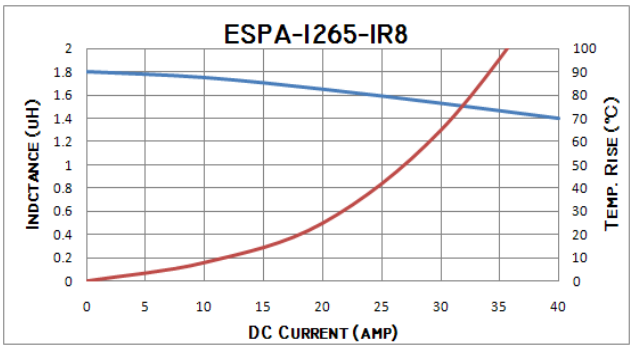
CHARACTERISTICS

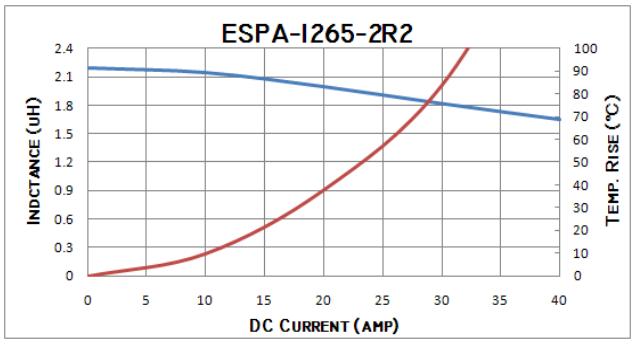
RoHS COMPLIANT

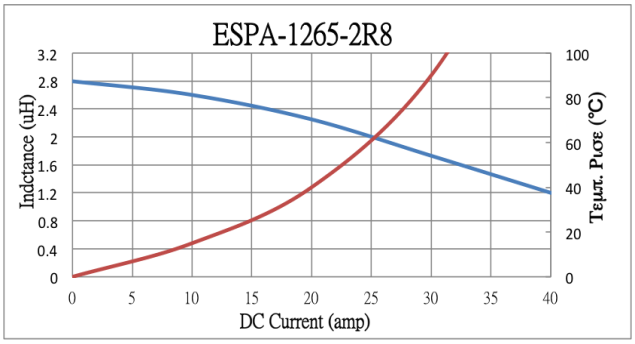
ITEM P/N	ESPA-1265-SERIES	TEST INSTRUMENT	Zentech-3305 / Zentech502BC
PRODUCT	SMD Inductor	TEST FREQUENCY	100 kHz / 1.0V

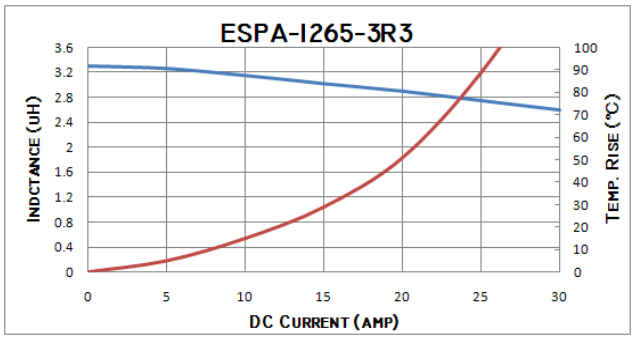
PERFORMANCE CURVES

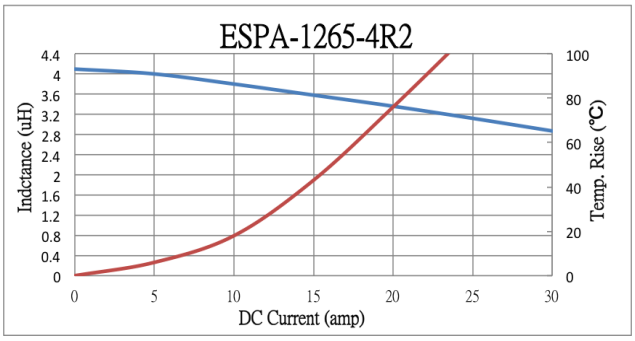


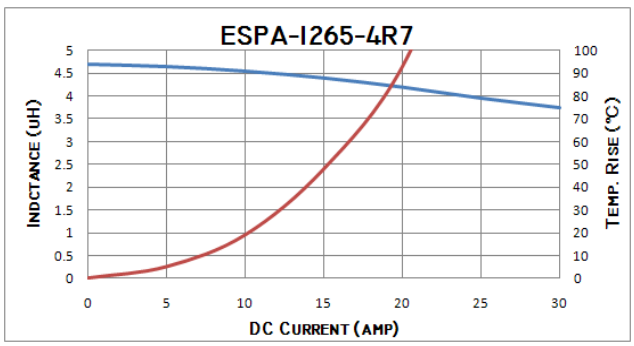


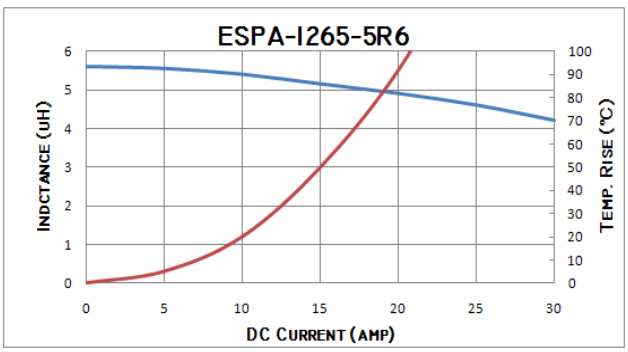












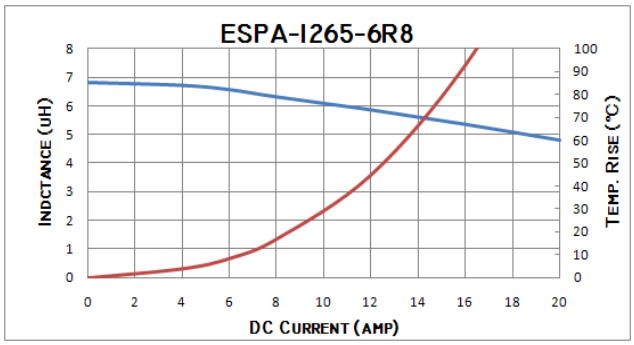
Version: A1.0

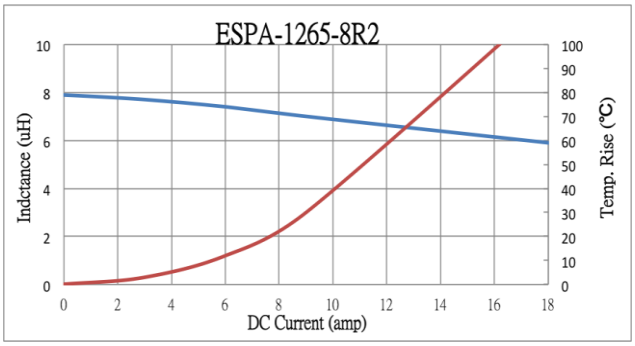
CHARACTERISTICS

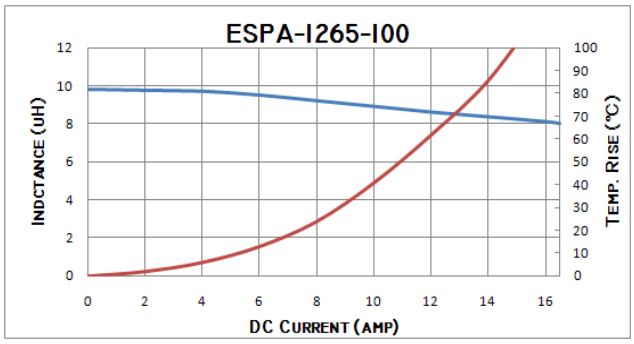
RoHS COMPLIANT

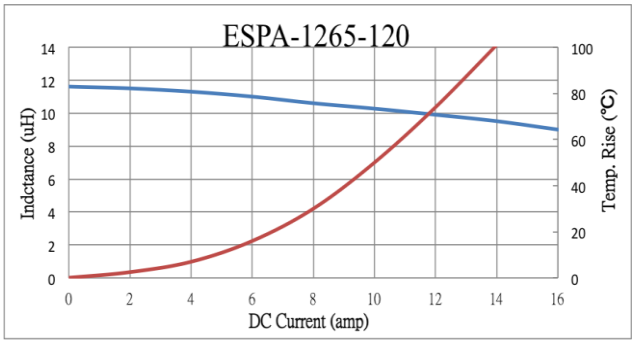
ITEM P/N	ESPA-1265-SERIES	TEST INSTRUMENT	Zentech-3305 / Zentech502BC
PRODUCT	SMD Inductor	TEST FREQUENCY	100 kHz / 1.0V

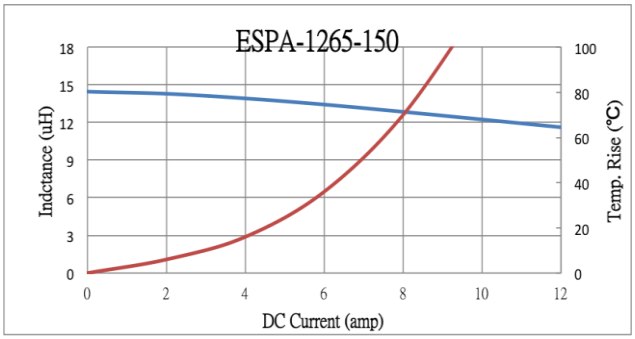
PERFORMANCE CURVES

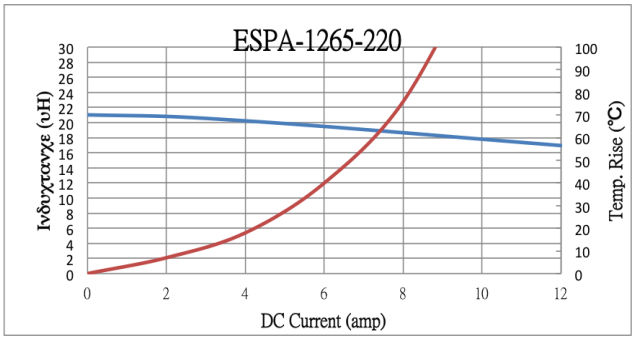


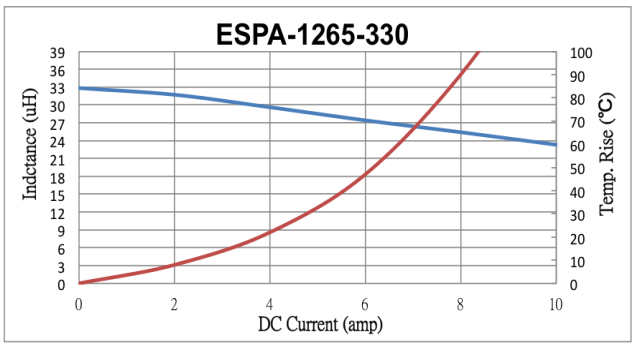


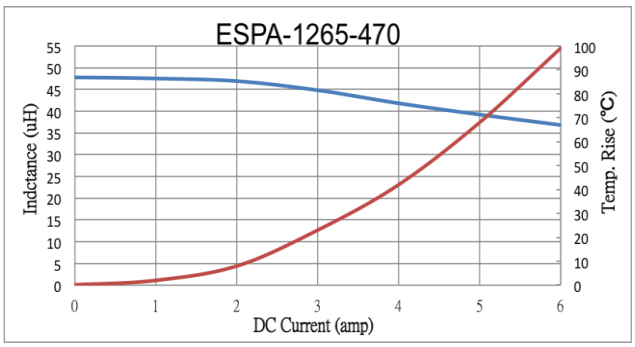












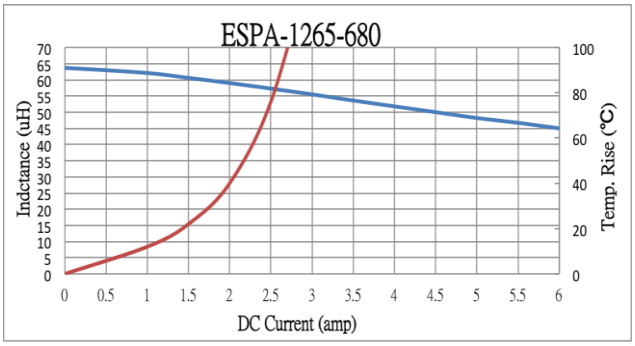
Version: A1.0

CHARACTERISTICS

RoHS COMPLIANT

ITEM P/N	ESPA-1265-SERIES	TEST INSTRUMENT	Zentech-3305 / Zentech502BC
PRODUCT	SMD Inductor	TEST FREQUENCY	100 kHz / 1.0V

PERFORMANCE CURVES



CHARACTERISTICS

RoHS COMPLIANT

ITEM P/N	ESPA-1265-SERIES	TEST INSTRUMENT	Zentech-3305 / Zentech502BC
PRODUCT	SMD Inductor	TEST FREQUENCY	100 kHz / 1.0V

MECHANICAL RELIABILITY

TEST	Specification & Requirement	Method Used
Solderability	The surface of terminal/pin tested shall be covered with new solder by 95%	Solder heat proof: Preheating: 180 ±10℃ 90 seconds Soldering: 255 ±5℃ for 3 ±1 sec
Shock	Inductance change within ± 5% Without mechanical damage	Drop down with 981m/s2 (100G) shock Attitude upon a rubber block method shock testing machinem, 3 tests.
Vibration	Inductance change within ± 5% Without mechanical damage	Vibration frequency: 10Hz to 55Hz to 10Hz 60 seconds cycle Vibration time: 2 hours

ENDURANCE RELIABILITY

TEST	Specification & Requirement	Method Used
Thermal Shock	Inductance change within ± 5% Without mechanical damage	-55℃, (30 mins) -> room temp. (5 mins) -> 125℃, (30 mins) -> room temp. (5 mins) 100 cycles
Heat Resistance	Inductance change within ± 5% Without mechanical damage	Apply IDC current @ 85℃ ambient Duration: 1000 hrs
Humidity Resistance	Inductance change within ± 5% Without mechanical damage	Apply IDC current @ 60℃ ambient Humidity: 90~95% Duration: 1000 hrs
Low Temp. Storing	Inductance change within ± 5% Without mechanical damage	Storing Temp. -55 ±2 ℃ for total 1,000 +4/-0 hours
High Temp. Storing	Inductance change within ± 5% Without mechanical damage	Storing Temp. 125 ±2 ℃ for total 1,000 +4/-0 hours

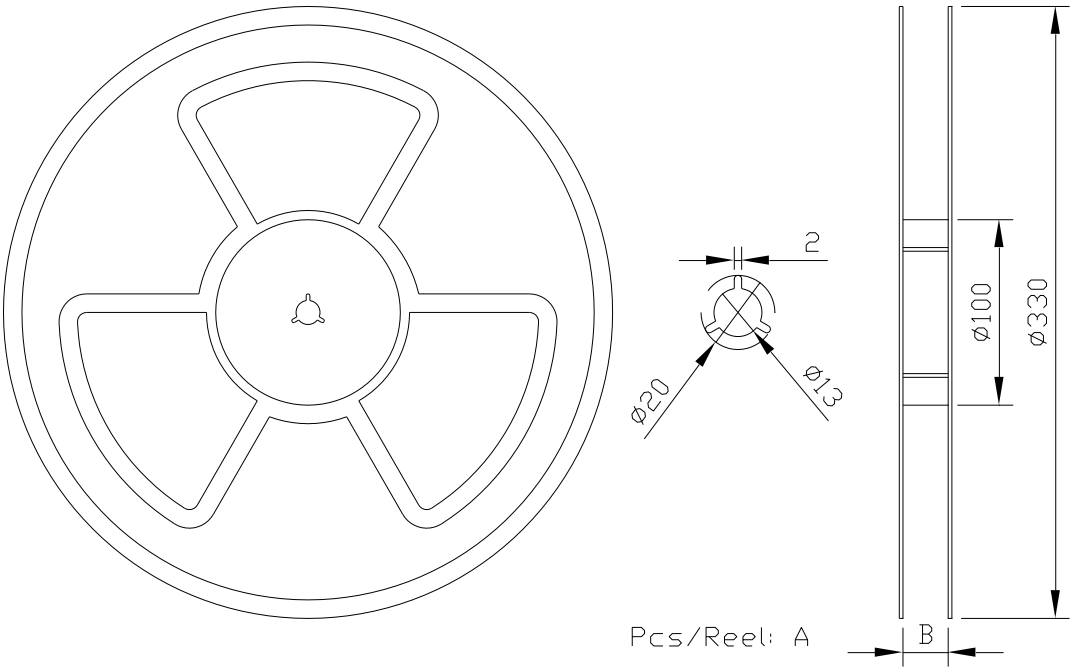
Version: A1.0

PACKING FOR SMD

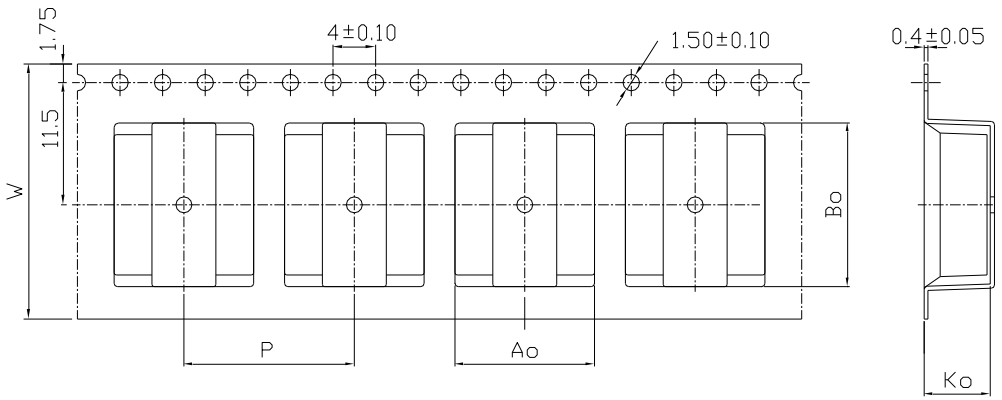
RoHS COMPLIANT

ITEM P/N	ESPA-1265-SERIES	TEST INSTRUMENT	Zentech-3305 / Zentech502BC
PRODUCT	SMD Inductor	TEST FREQUENCY	100 kHz / 1.0V

CARRIERTAPEING REEL & CARRIER MATERIALS (PAPER PLASTICS) UNIT : (mm)



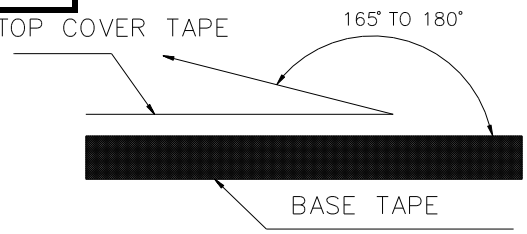
A	B	Ao	Bo	Ko
400	25	13.1 ± 0.1	14.9 ± 0.1	6.7 TYP



W	P
24	20

Typical Pulling Force:

10 grams



HUNG TRON

HUNGTRON TECHNOLOGY Co.,Ltd.