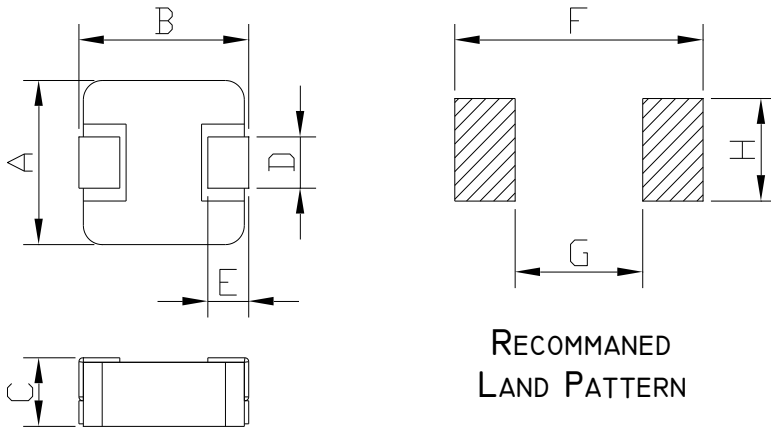


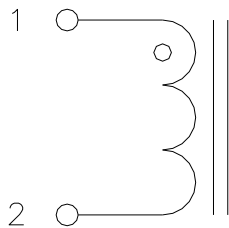
ITEM P/N	ESPA-1250-SERIES	TEST INSTRUMENT	Zentech-3305 / Zentech502BC
PRODUCT	SMD Inductor	TEST FREQUENCY	100 kHz / 1.0V

PACKING DIMENSIONS (mm)

1250 1R0M	Dimensions
A	12.8 ± 0.3
B	13.5 ± 0.5
C	5.0 MAX
D	3.5 ± 0.5
E	2.5 ± 0.5
F	15 Typ
G	6 Typ
H	5 Typ

RECOMMENDED
LAND PATTERN**EXPLANATION OF PART NUMBERS**

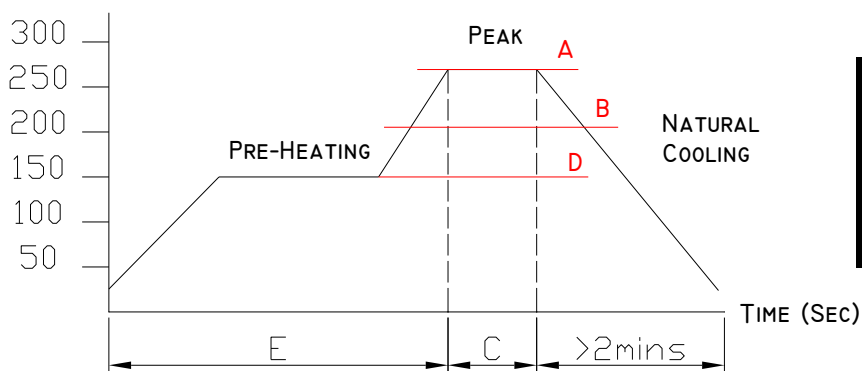
1	2	3	4	5	6	7	8	9	10	11	12		
E	S	P	A	-	1	2	5	0	-	1	R	0	M
<u>Serial Codes</u>			<u>Size</u>			<u>Inductance Code</u>							

CONNECTIONS

- ⊙ Inductor Contents ONE (1) Set(s) of Coil
- ⊙ DC/AC Current Shall Be Introduced By Any One of Two Pads

RECOMMENDED SOLDERING TEMP. GRAPH

TEMPERATURE (°C)



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

ITEM P/N	ESPA-1250-SERIES	TEST INSTRUMENT	Zentech-3305 / Zentech502BC
PRODUCT	SMD Inductor	TEST FREQUENCY	100 kHz / 1.0V

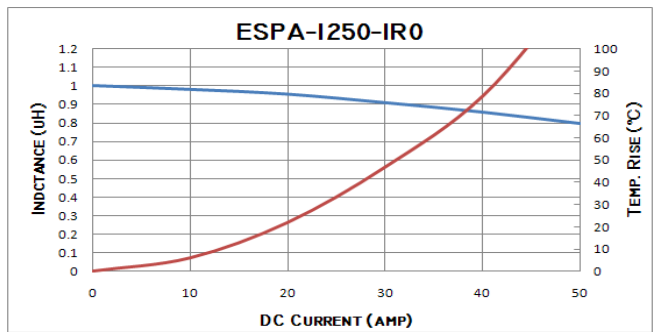
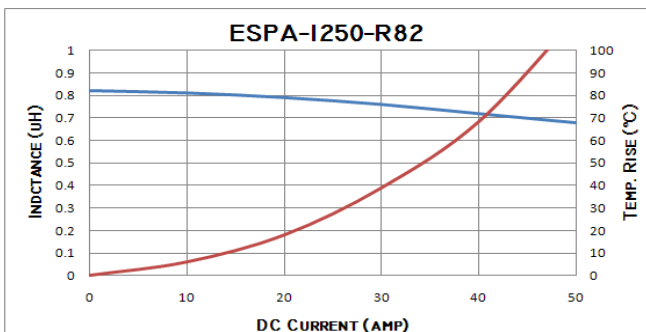
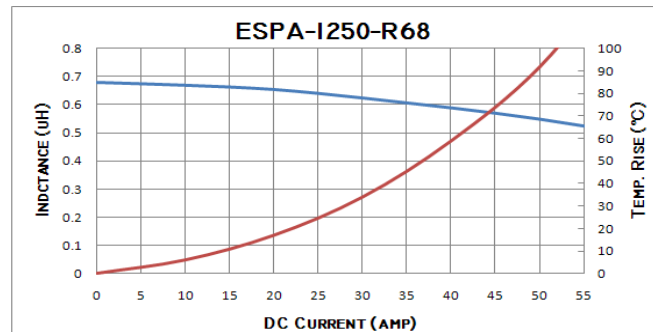
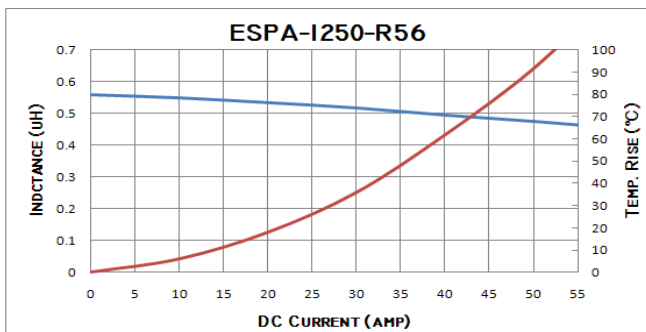
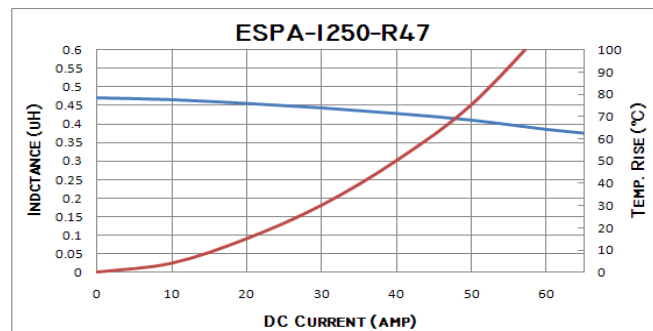
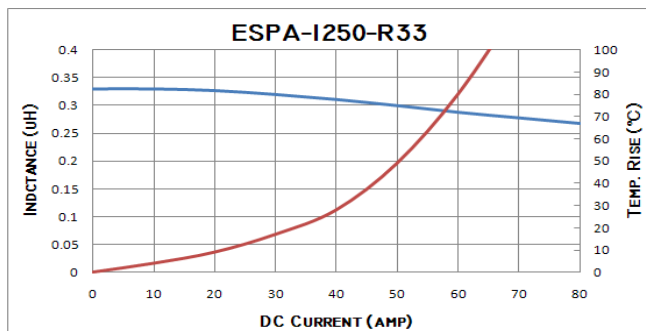
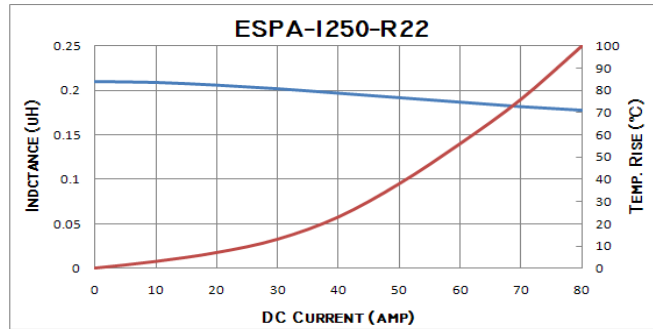
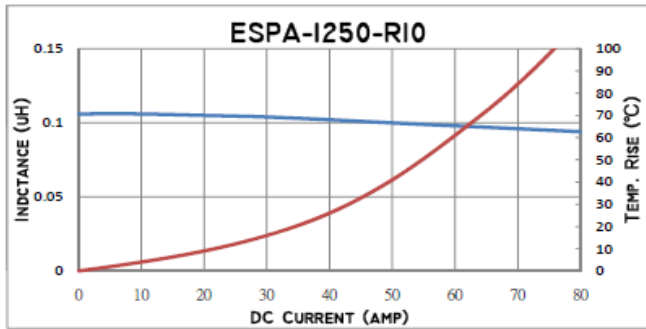
ELECTRICAL CHARACTERISTICS

P/N	LO Inductance $\mu\text{H} \pm 20\%$ @0A	DCR (m Ω)		Heat Rating Current	Saturation Current
		[Typical]	[Max]	I _{dc} (AMP) Typical	I _{sat} (AMP) Typical
ESPA-1250-R10M	0.10	0.53	0.60	55	80
ESPA-1250-R22M	0.22	0.64	0.80	51	80
ESPA-1250-R33M	0.33	0.85	1.20	42	80
ESPA-1250-R47M	0.47	1.10	1.30	38	65
ESPA-1250-R56M	0.56	1.30	1.60	36	55
ESPA-1250-R68M	0.68	1.50	1.70	34	54
ESPA-1250-R82M	0.82	2.00	2.30	31	53
ESPA-1250-1R0M	1.0	2.10	2.50	29	50
ESPA-1250-1R2M	1.2	2.80	3.50	25	49
ESPA-1250-1R5M	1.5	3.40	4.10	23	48
ESPA-1250-1R8M	1.8	4.20	4.90	19	40
ESPA-1250-2R2M	2.2	4.60	5.50	20	32
ESPA-1250-2R7M	2.7	5.70	6.80	18	32
ESPA-1250-3R3M	3.3	7.70	9.20	15	32
ESPA-1250-4R7M	4.7	12.8	15.0	12	27
ESPA-1250-5R6M	5.6	14.0	16.5	11.5	22
ESPA-1250-6R8M	6.8	15.4	18.5	11	21
ESPA-1250-7R8M	7.8	17.2	20.5	10	18
ESPA-1250-8R2M	8.2	18.9	22.5	9.5	18
ESPA-1250-100M	10	21.4	25.5	9	16
ESPA-1250-150M	15	44	48	6	9
ESPA-1250-220M	22	50	58	5.5	8
ESPA-1250-330M	33	75	84	3.5	6
ESPA-1250-470M	47	138	152	2	4

- ⊙ All test Data is referenced to 25°C ambient
- ⊙ Typical Heat Rating DC Current would cause an approximately ΔT of 40°C
- ⊙ Typical Saturation DC Current would cause L_o to drop approximately 30%
- ⊙ Operation Temperature Range : -55°C ~ 125°C
- ⊙ The Part temperature (ambient + ΔT) should not exceed 125°C 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.

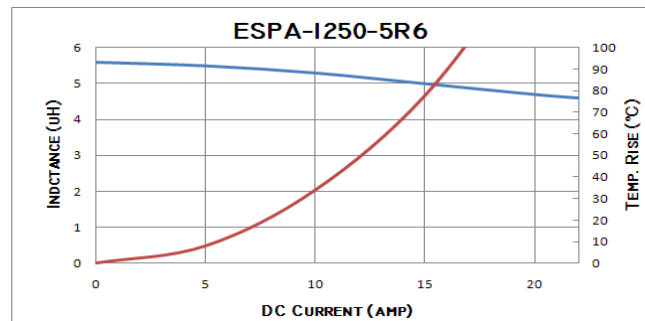
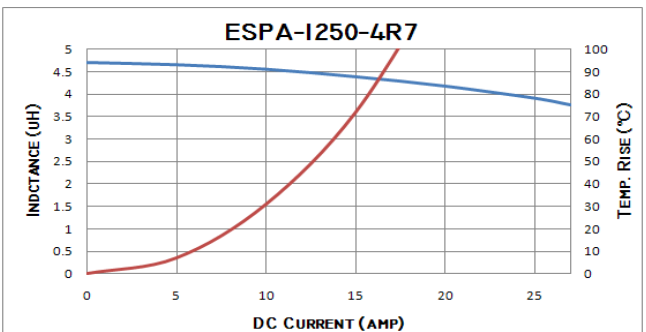
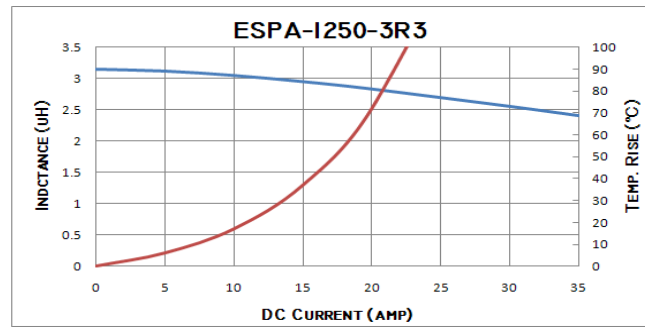
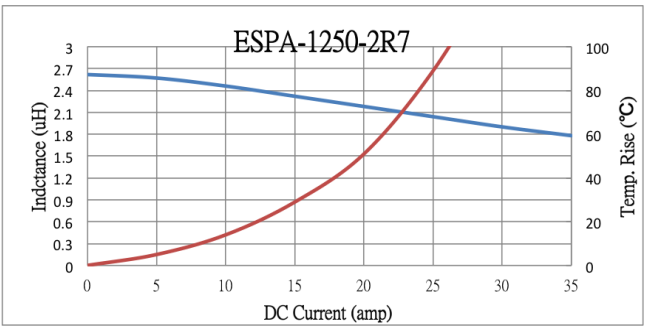
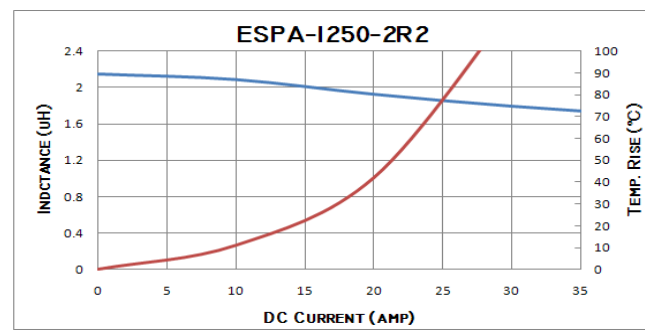
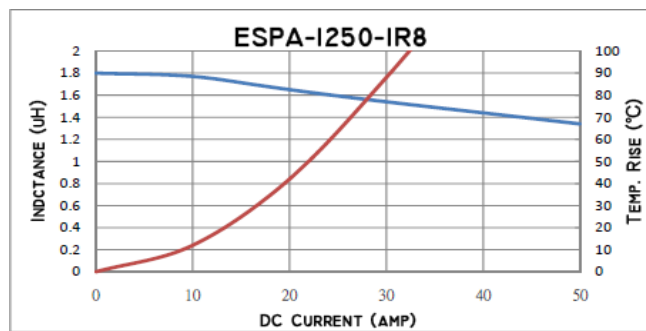
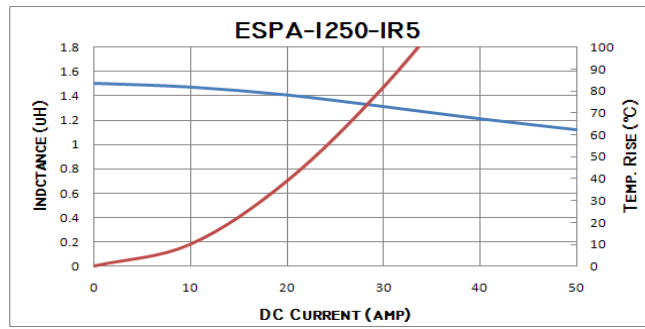
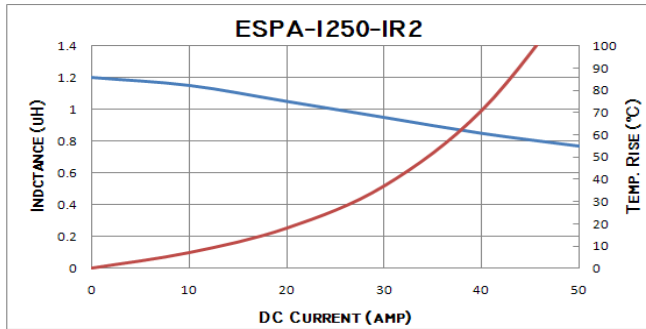
ITEM P/N	ESPA-1250-SERIES	TEST INSTRUMENT	Zentech-3305 / Zentech502BC
PRODUCT	SMD Inductor	TEST FREQUENCY	100 kHz / 1.0V

PERFORMANCE CURVES



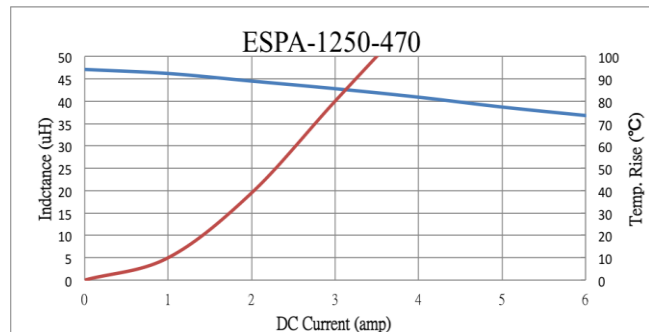
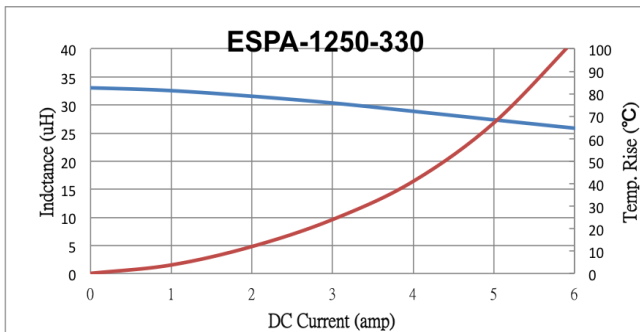
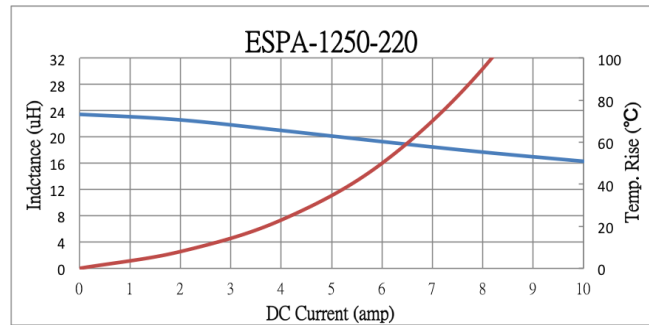
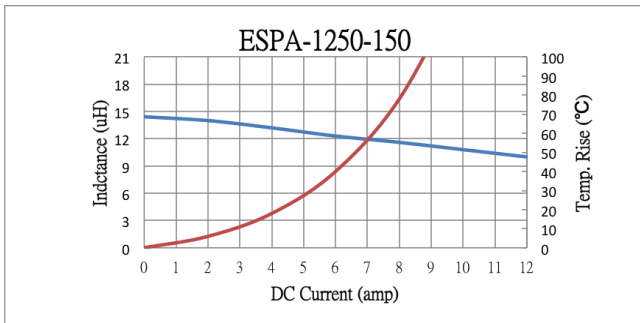
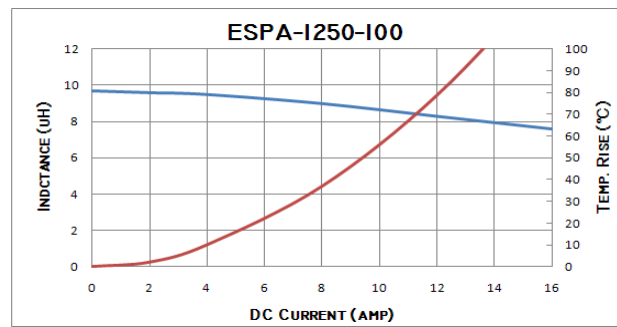
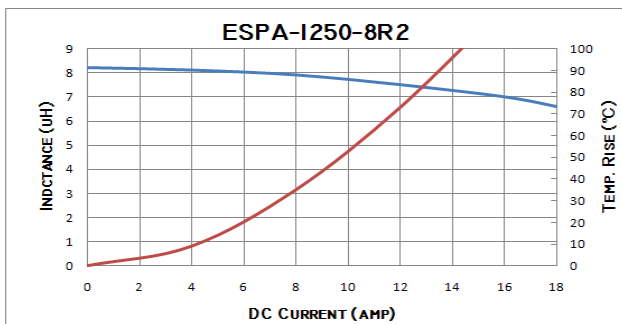
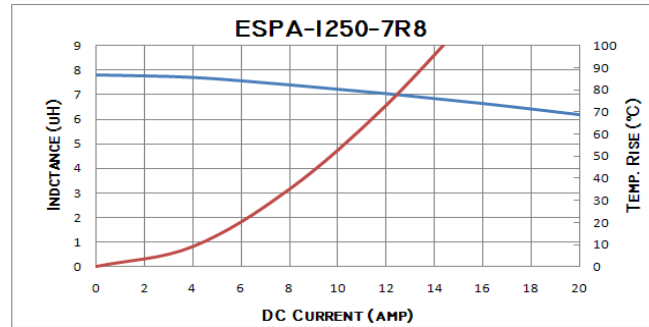
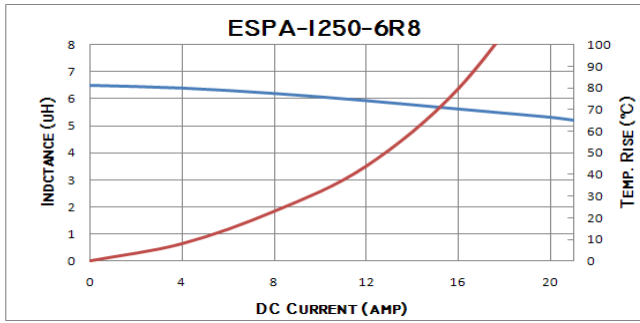
ITEM P/N	ESPA-1250-SERIES	TEST INSTRUMENT	Zentech-3305 / Zentech502BC
PRODUCT	SMD Inductor	TEST FREQUENCY	100 kHz / 1.0V

PERFORMANCE CURVES



ITEM P/N	ESPA-1250-SERIES	TEST INSTRUMENT	Zentech-3305 / Zentech502BC
PRODUCT	SMD Inductor	TEST FREQUENCY	100 kHz / 1.0V

PERFORMANCE CURVES



ITEM P/N	ESPA-1250-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°C 90 seconds Soldering: 255 ±5°C 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

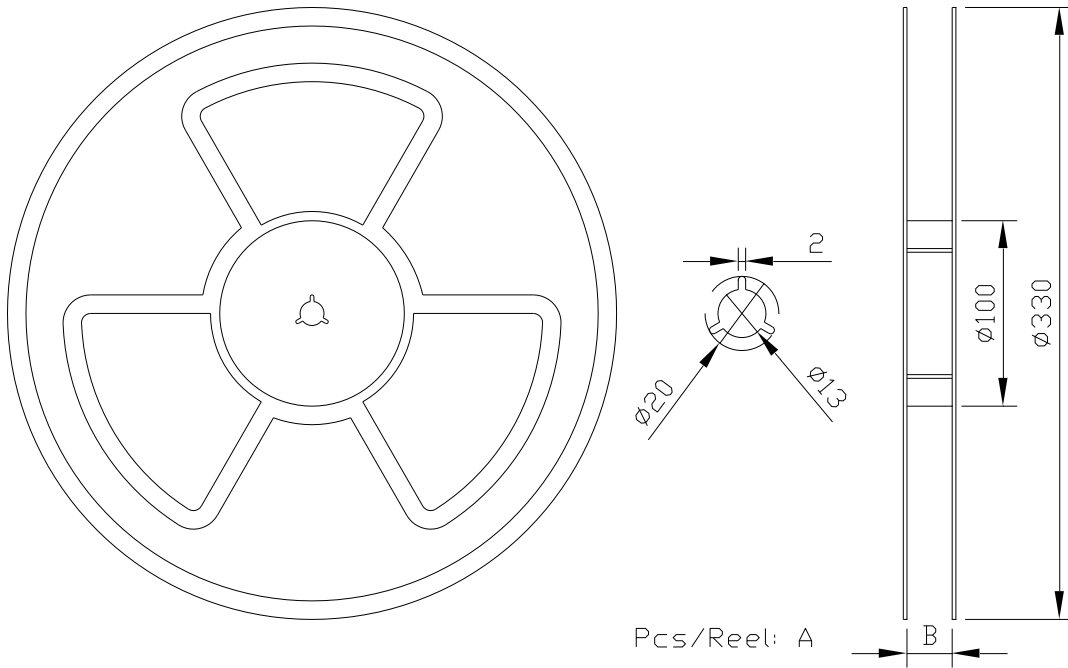
TEST	Specification & Requirement	Method Used
Thermal Shock	Inductance change within ± 5% Without mechanical damage	-55°C, (30 mins) -> room temp. (5 mins) -> 125°C, (30 mins) -> room temp. (5 mins) 100 cycles
Heat Resistance	Inductance change within ± 5% Without mechanical damage	Apply IDC current @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

PACKING FOR SMD

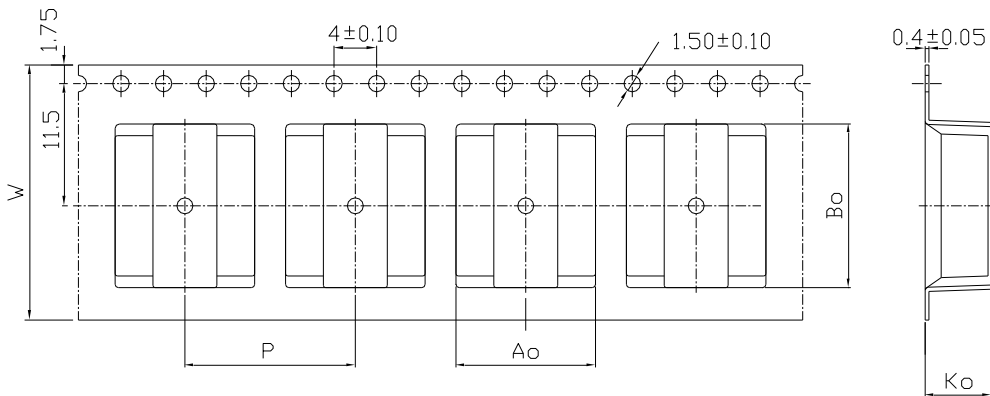
**RoHS
COMPLIANT**

ITEM P/N	ESPA-1250-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
500	25	13.1 ± 0.1	14.9 ± 0.1	6.7 TYP



W	P
24	20

Typical Pulling Force:

10 grams

