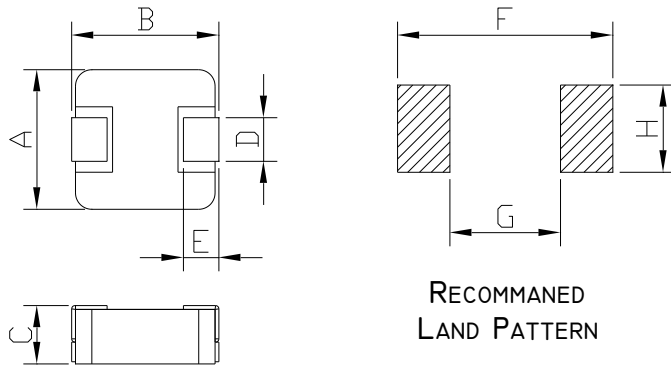


ITEM P/N	ESPA-0618T-SERIES	TEST INSTRUMENT	Zentech-3305 / Zentech502BC
PRODUCT	SMD Inductor	TEST FREQUENCY	100 kHz / 1.0V

PACKING DIMENSIONS (mm)

ESPA 0618T	Dimensions
A	6.6 ± 0.3
B	7.1 ± 0.3
C	1.8 MAX
D	3.0 ± 0.3
E	1.6 ± 0.5
F	7.4 Typ
G	3.7 Typ
H	3.5 Typ

EXPLANATION OF PART NUMBERS

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

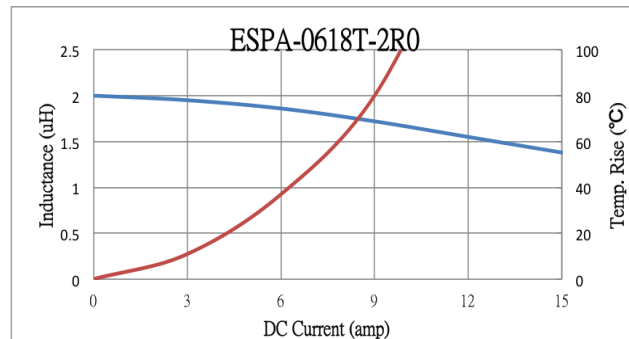
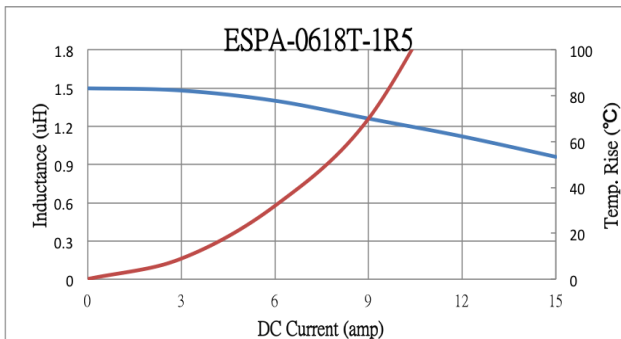
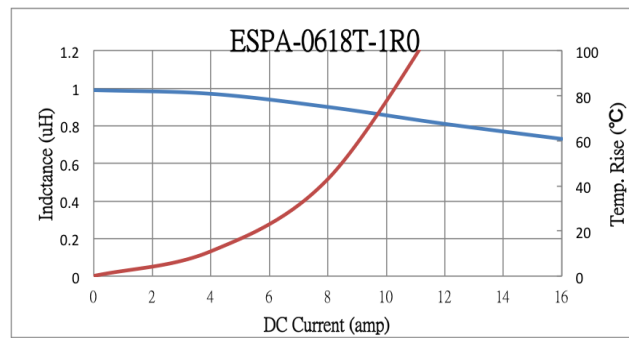
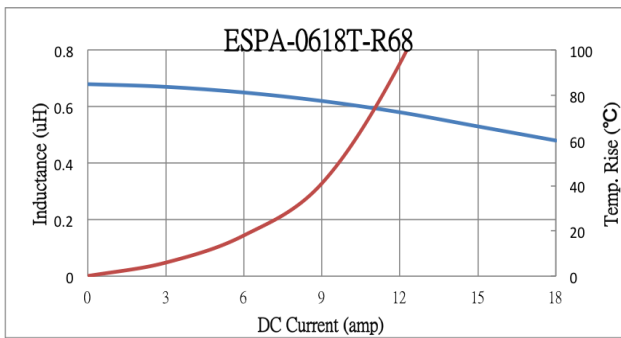
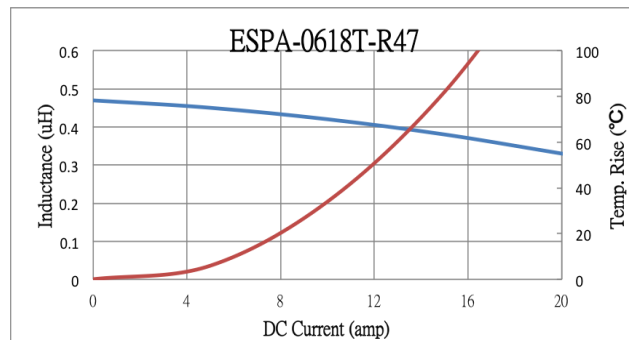
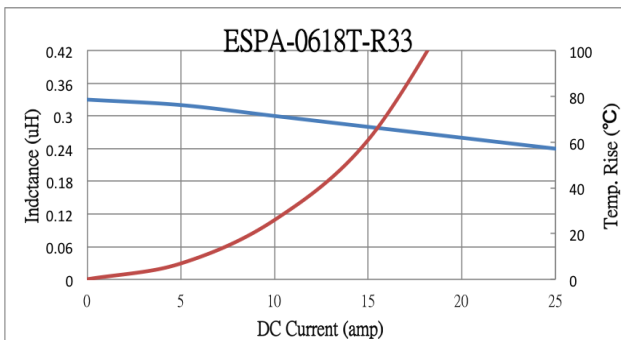
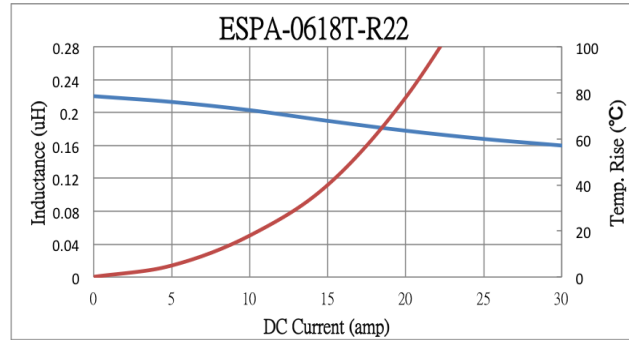
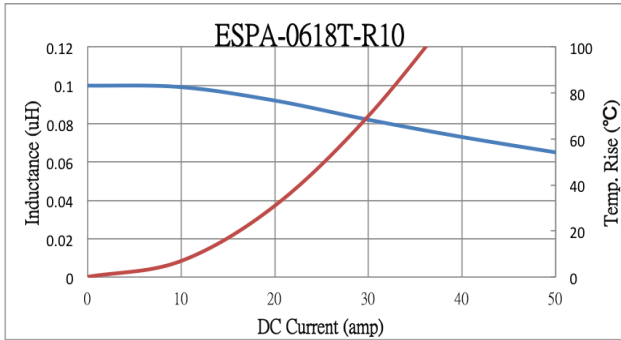
ELECTRICAL CHARACTERISTICS

P/N	L0 Inductance μH ±20% @0A	DCR (mΩ)		Heat Rating Current	Saturation Current
		[Typical]	[Max]	I _{dc} (AMP) Typical	I _{sat} (AMP) Typical
ESPA-0618T-R10M	0.10	2.0	2.5	18.0	45.0
ESPA-0618T-R22M	0.22	4.5	5.2	14.0	29.0
ESPA-0618T-R33M	0.33	5.2	6.8	12.0	22.0
ESPA-0618T-R47M	0.47	7.3	8.4	11.0	18.0
ESPA-0618T-R68M	0.68	10.8	12.7	9.0	17.0
ESPA-0618T-1R0M	1.0	14.5	17.0	7.0	14.0
ESPA-0618T-1R5M	1.5	20.0	26.0	6.5	12.0
ESPA-0618T-2R0M	2.0	28.0	32.0	6.0	13.0
ESPA-0618T-2R2M	2.2	31.0	35.0	6.0	13.0
ESPA-0618T-3R3M	3.3	56.0	60.0	3.5	10.0
ESPA-0618T-4R7M	4.7	68.0	72.0	3.5	5.0
ESPA-0618T-6R8M	6.8	101.0	110.0	2.8	3.5

- ⊙ 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 L₀ 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.

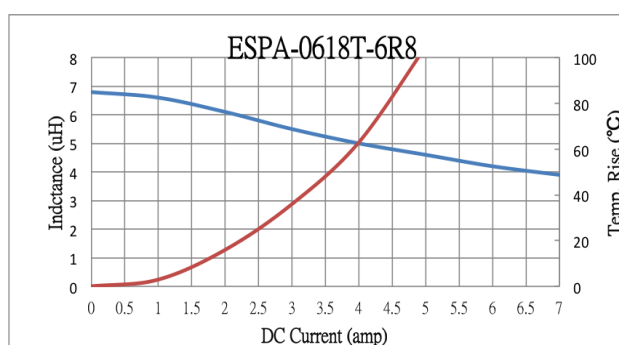
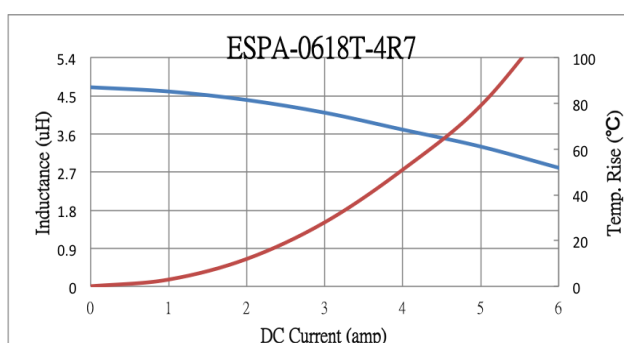
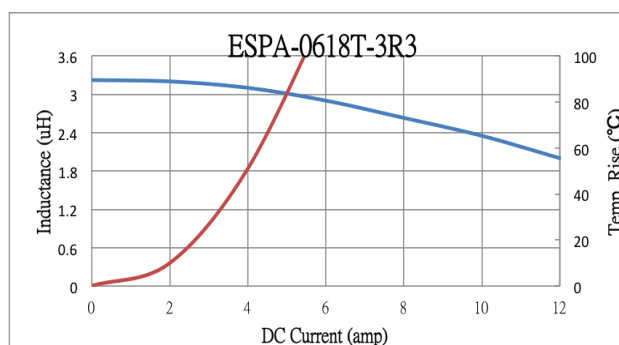
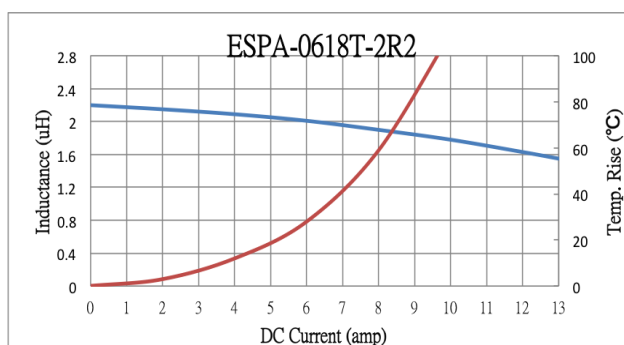
ITEM P/N	ESPA-0618T-SERIES	TEST INSTRUMENT	Zentech-3305 / Zentech502BC
PRODUCT	SMD Inductor	TEST FREQUENCY	100 kHz / 1.0V

PERFORMANCE CURVES

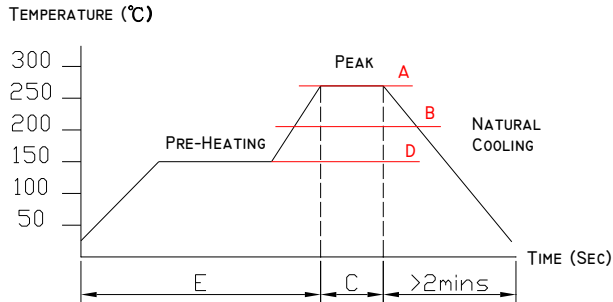


ITEM P/N	ESPA-0618T-SERIES	TEST INSTRUMENT	Zentech-3305 / Zentech502BC
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PERFORMANCE CURVES



ITEM P/N	ESPA-0618T-SERIES	TEST INSTRUMENT	Zentech-3305 / Zentech502BC
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RECOMMENDED SOLDERING TEMP. GRAPH

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

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/s ² (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

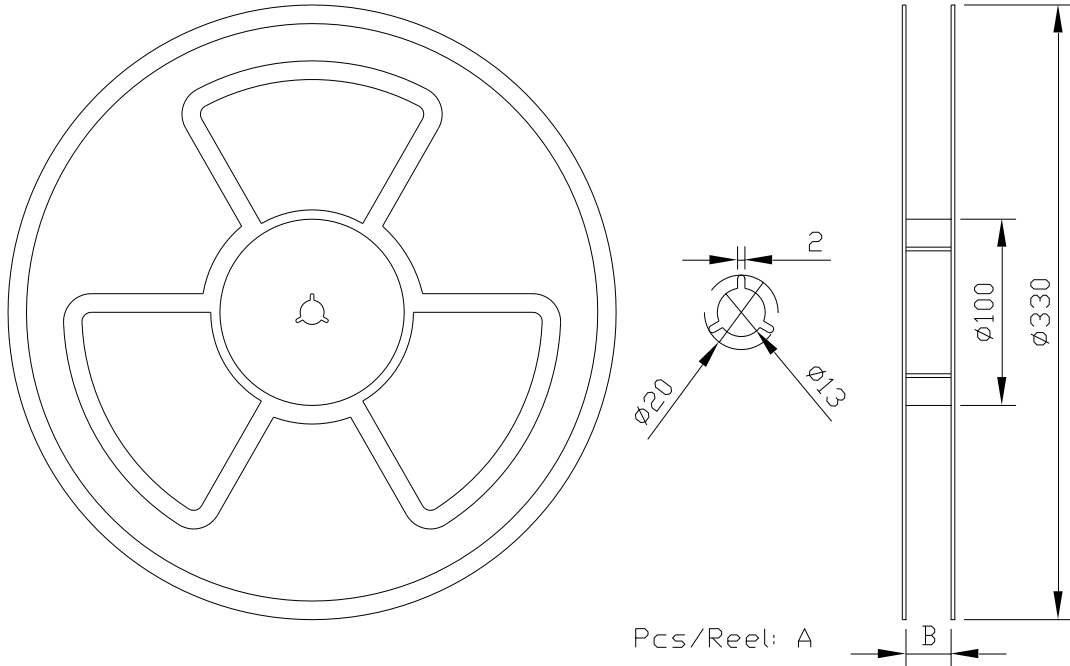
TEST	Specification & Requirement	Method Used
Thermal Shock	Inductance change within ± 5% Without mechanical damage	-55°C, (30 mins) -> room temp. (5 mins) -> 125°C, (30 mins) -> room temp. (5 mins) 100 cycles
Heat Resistance	Inductance change within ± 5% Without mechanical damage	Apply IDC current @ 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

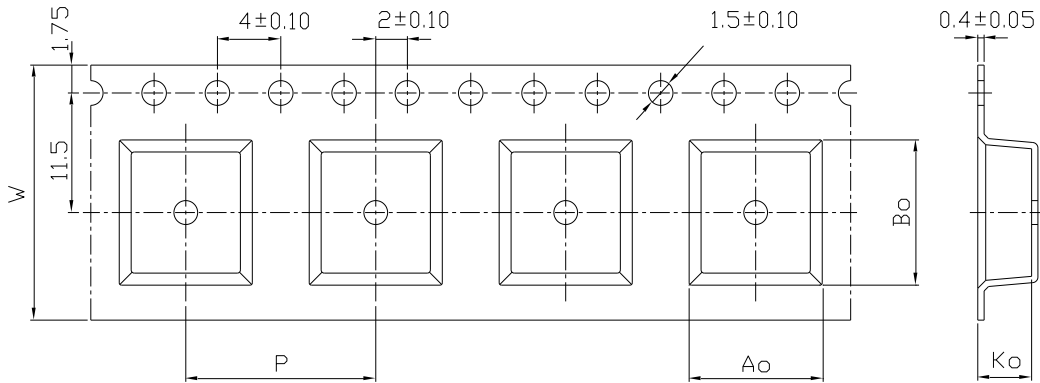
**RoHS
COMPLIANT**

ITEM P/N	ESPA-0618T-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
1500	17	6.9 ± 0.1	7.6 ± 0.1	2.0 ± 0.1



W	P
16	12

Typical Pulling Force:

10 grams

