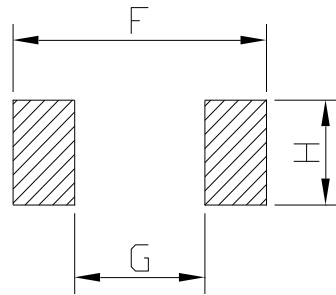
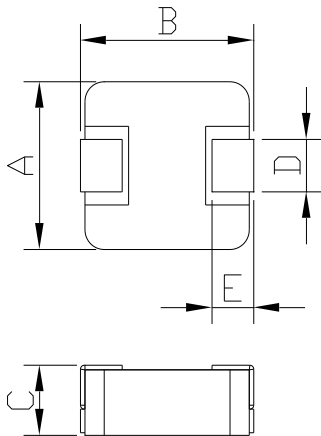


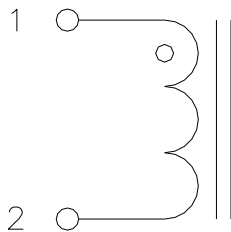
ITEM P/N	ESPA-1235-SERIES	TEST INSTRUMENT	Zentech-3305 / Zentech502BC
PRODUCT	SMD Inductor	TEST FREQUENCY	100 kHz / 1.0V

PACKING DIMENSIONS (mm)RECOMMENDED
LAND PATTERN

1235 1R0M	Dimensions
A	12.8 ± 0.3
B	13.5 ± 0.5
C	3.5 ± 0.5
D	3.5 ± 0.5
E	2.5 ± 0.5
F	15 Typ
G	6 Typ
H	5 Typ

EXPLANATION OF PART NUMBERS

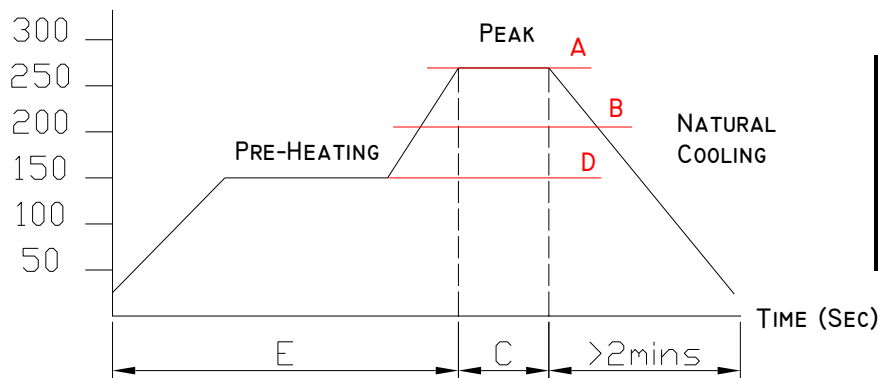
1	2	3	4	5	6	7	8	9	10	11	12		
E	S	P	A	-	1	2	3	5	-	1	R	0	M
<u>Serial Codes</u>					<u>Size</u>				<u>Inductance Code</u>				

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-1235-SERIES	TEST INSTRUMENT	Zentech-3305 / Zentech502BC
PRODUCT	SMD Inductor	TEST FREQUENCY	100 kHz / 1.0V

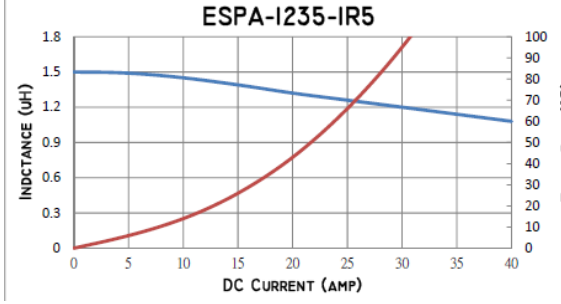
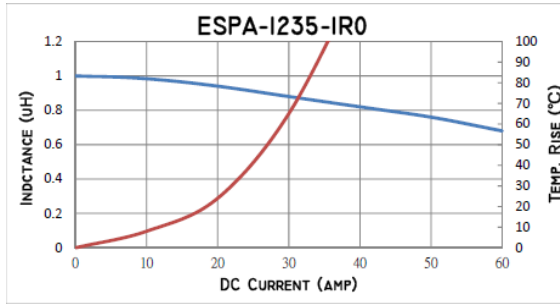
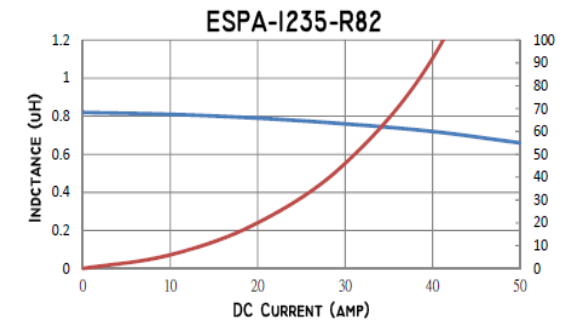
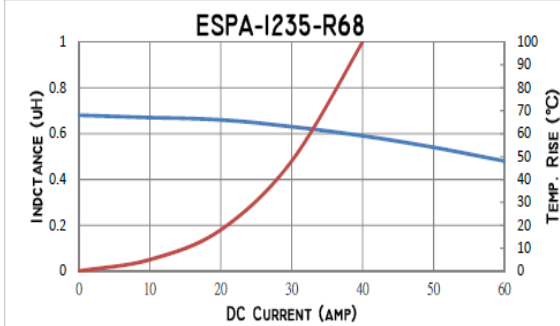
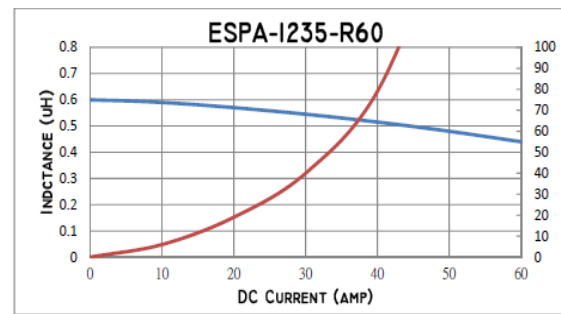
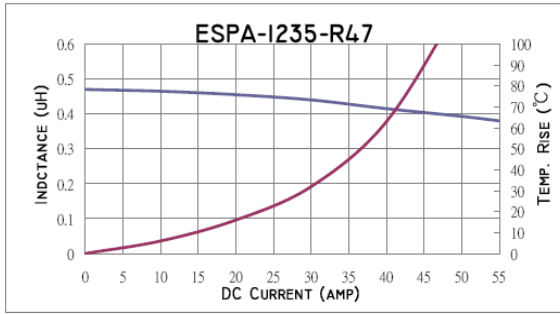
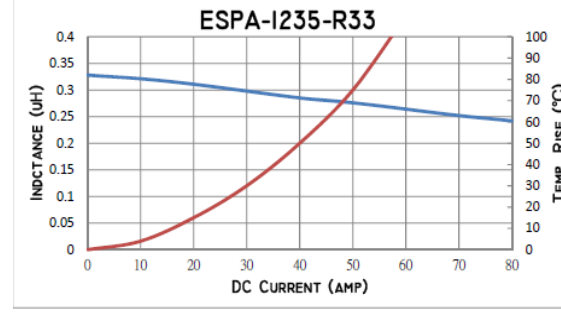
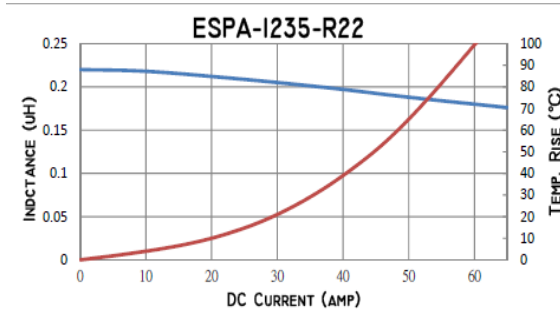
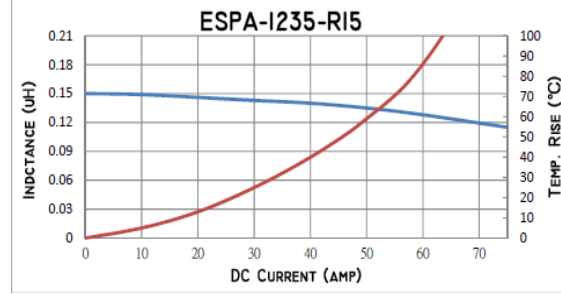
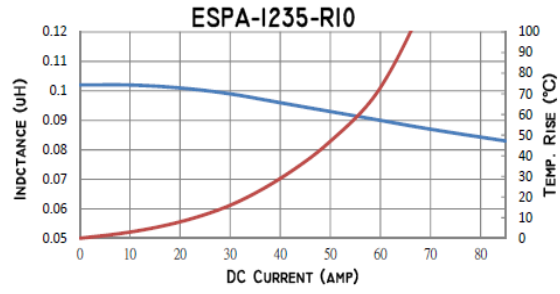
ELECTRICAL CHARACTERISTICS

P/N	L0 Inductance $\mu\text{H} \pm 20\%$ @0A	DCR (m Ω)		Heat Rating Current	Saturation Current
		[Typical]	[Max]	Idc (AMP) Typical	Isat (AMP) Typical
ESPA-1235-R10M	0.10	0.8	0.96	43	84
ESPA-1235-R15M	0.15	1.0	1.2	41	75
ESPA-1235-R22M	0.22	1.1	1.3	38.5	65
ESPA-1235-R33M	0.33	1.3	1.5	36.5	62
ESPA-1235-R47M	0.47	1.6	2.0	32	55
ESPA-1235-R60M	0.60	1.8	2.2	29	51
ESPA-1235-R68M	0.68	2.3	2.5	28	49
ESPA-1235-R82M	0.82	2.6	3.0	25	44
ESPA-1235-1R0M	1.00	3.3	3.5	24	40
ESPA-1235-1R5M	1.50	5.1	5.5	19	35
ESPA-1235-1R8M	1.80	6.5	7.0	16.5	30
ESPA-1235-2R2M	2.20	7.2	8.0	16	29
ESPA-1235-3R3M	3.30	11.0	12.0	12	27
ESPA-1235-4R7M	4.70	14.3	15.0	10	24
ESPA-1235-5R6M	5.60	17.1	18.0	9.5	19
ESPA-1235-6R8M	6.80	22.0	24.0	8	14
ESPA-1235-8R2M	8.20	24.8	28.0	7.5	13.5
ESPA-1235-100M	10.0	30.4	34.0	7	13

- ⊙ 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 Lo 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.

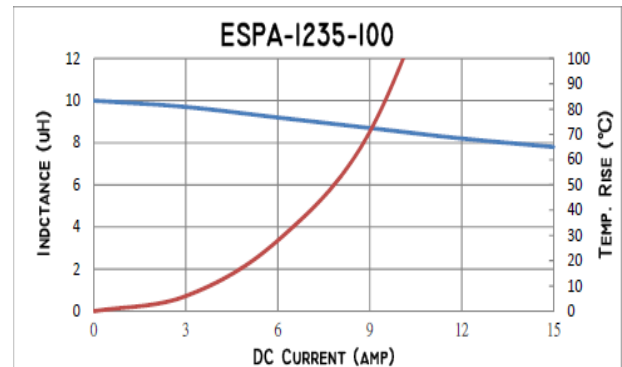
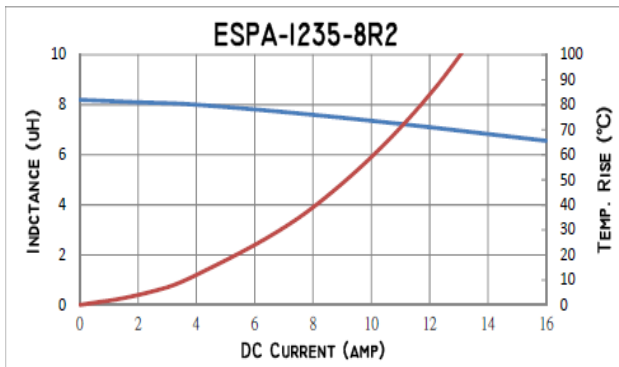
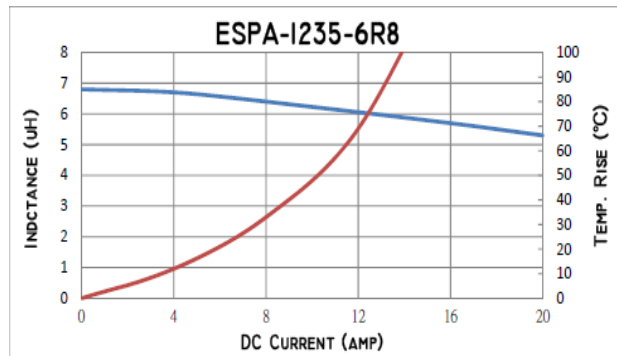
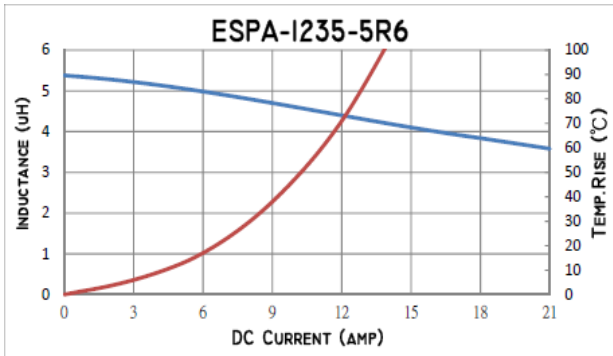
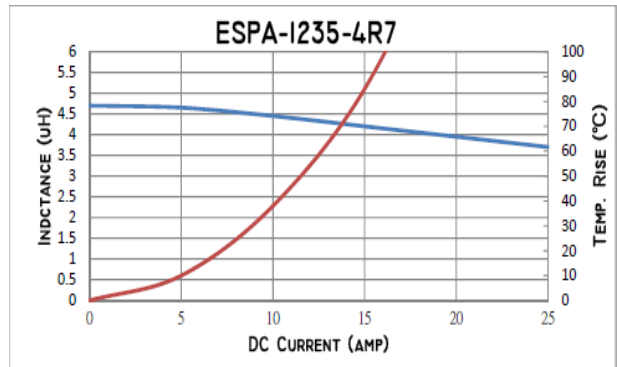
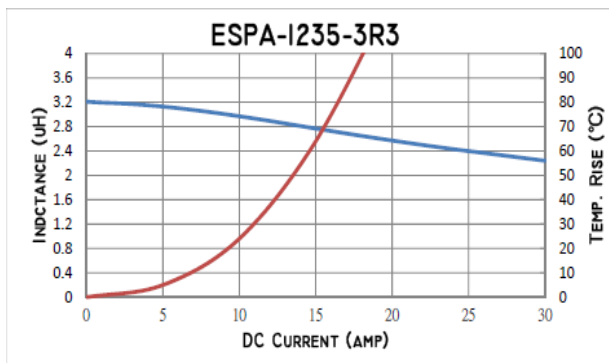
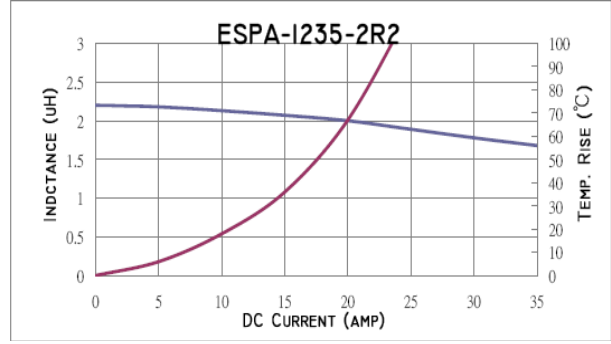
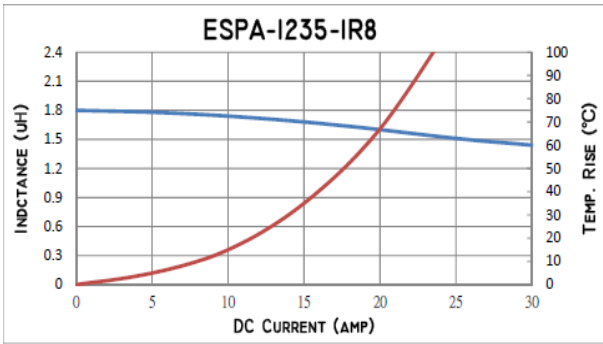
ITEM P/N	ESPA-1235-SERIES	TEST INSTRUMENT	Zentech-3305 / Zentech502BC
PRODUCT	SMD Inductor	TEST FREQUENCY	100 kHz / 1.0V

PERFORMANCE CURVES



ITEM P/N	ESPA-1235-SERIES	TEST INSTRUMENT	Zentech-3305 / Zentech502BC
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PERFORMANCE CURVES



ITEM P/N	ESPA-1235-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/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

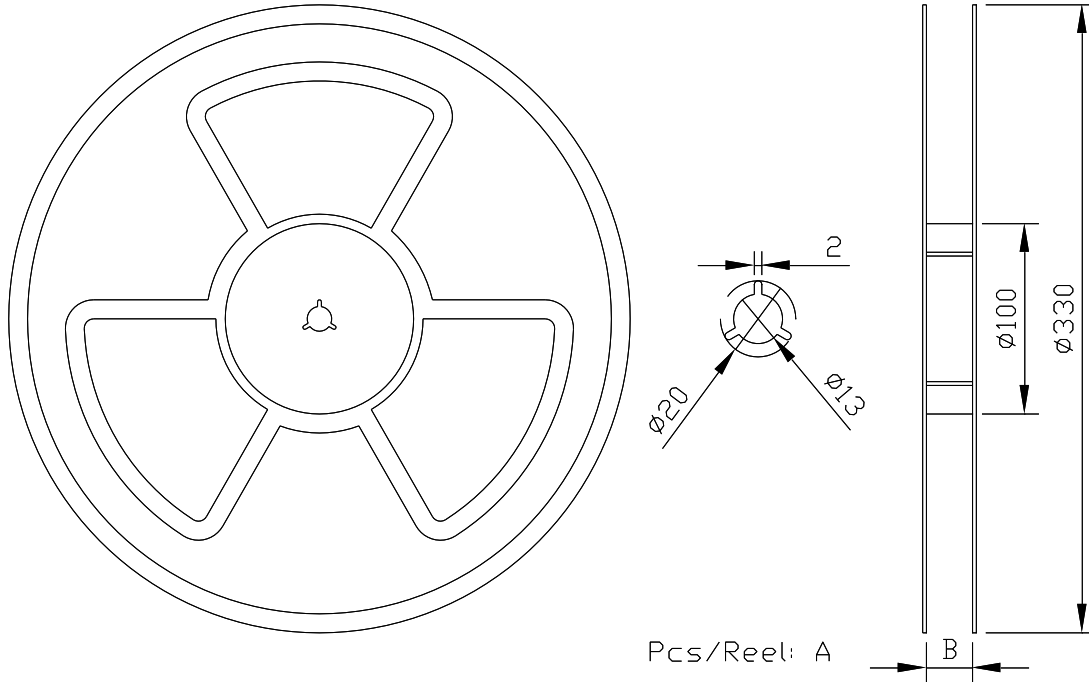
TEST	Specification & Requirement	Method Used
Thermal Shock	Inductance change within ± 5% Without mechanical damage	-55°C, (30 mins) -> room temp. (5 mins) -> 125°C, (30 mins) -> room temp. (5 mins) 100 cycles
Heat Resistance	Inductance change within ± 5% Without mechanical damage	Apply IDC current @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

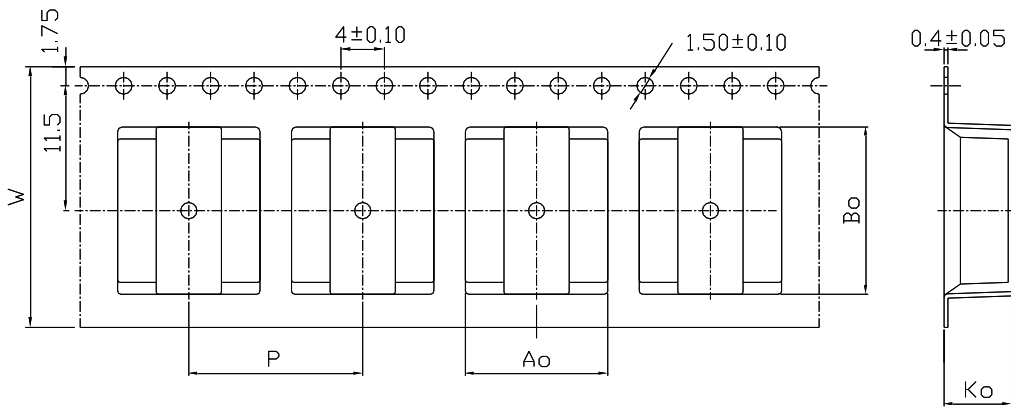
**RoHS
COMPLIANT**

ITEM P/N	ESPA-1235-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	4.3 TYP



W	P
24	20

Typical Pulling Force:

10 grams

