Revision Record					
Control No.	**Revision**	**Description**	**Date**	**Drawn**	**Approved**
	A0	Initial release TMAX-0530-4R7-M	2018/10/23	Heter	Roger
	A1	Add TMAX-0530-100-M	2018/10/29	Heter	Roger
	A2	Add TMAX-0530-1R0-M	2018/11/14	Heter	Roger
	A3	Add TMAX-0530-R33-M TMAX-0530-R68-M TMAX-0530-2R2-M TMAX-0530-3R3-M TMAX-0530-6R8-M	2018/11/21	Heter	Roger

530-XXX-M ded r Inductor

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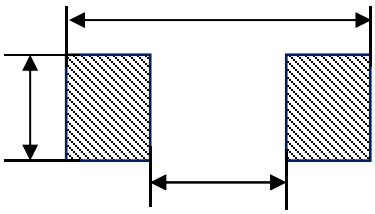
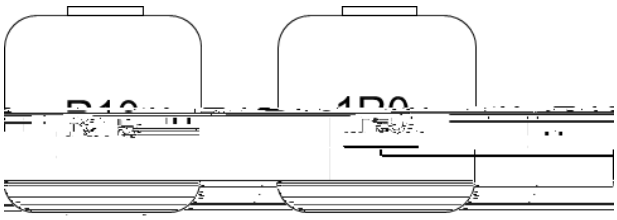
Recommend Land Pattern Dimensions in millimeters



Marking

- The inductor is marked with a 3-digit code by ink.
- For example: 1R0→ 1.0μH, R10→ 0.1μH.

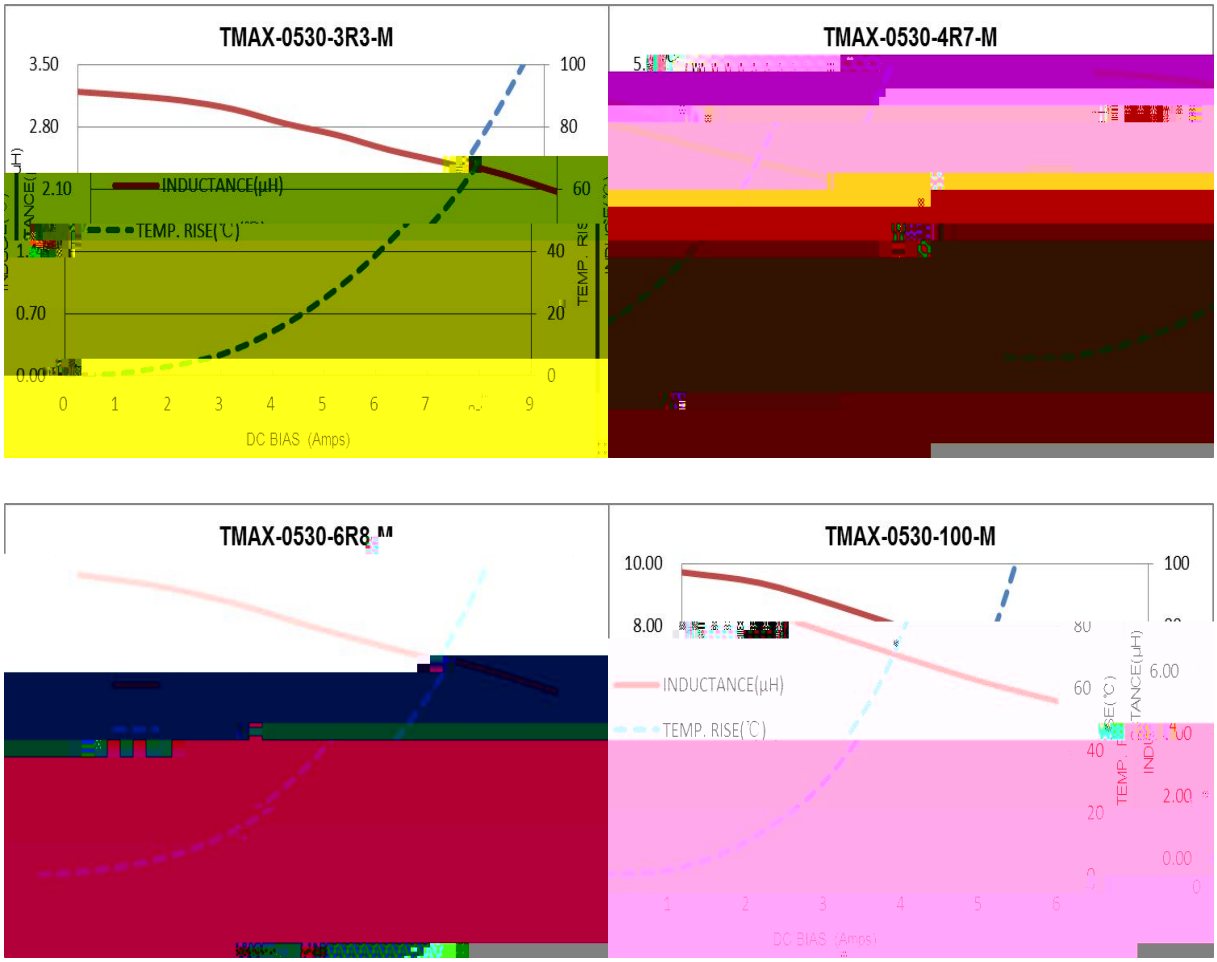


Specifications

Part No.	Inductance		DCR (mΩ)		Saturation Current	Heat Rating Current
					Isat (Amps.)	Idc (Amps.)
	L_0(μH)	Tolerance	Typ.	Max.	Typ.	Typ.
TMAX-0530-R33-M	0.33	±20%	4.55	5.15	19	14
TMAX-0530-R68-M	0.68	±20%	9.0	10.0	13	11
TMAX-0530-1R0-M	1.0	±20%	12	13.5	11	9.0
TMAX-0530-2R2-M	2.2	±20%	25	29	9.0	6.5
TMAX-0530-3R3-M	3.3	±20%	33	38	8.0	5.5
TMAX-0530-4R7-M	4.7	±20%	51	60	6.0	4.5
TMAX-0530-6R8-M	6.8	±20%	80	90	4.5	3.5
TMAX-0530-100-M	10.0	±20%	110	125	4.0	3.0

Notes:

1. All test data is referenced to 23±3 °C and 45%RH to 70%RH ambient.
2. Test Instruments 3260B LCR Meter, 3265B Bias Current Sourcns os a


TMAX-0530-3R3-M
3.50
2.80
2.10
1.40
0.70
0.00
100
80
60
40
20
0
INDUCTANCE(μH)
TEMP. RISE(℃)
TEMP. RISE
0 1 2 3 4 5 6 7 9
DC BIAS (Amps)
TMAX-0530-4R7-M
TMAX-0530-6R8-M
TMAX-0530-100-M
10.00
8.00
100
80
60
40
20
0
6.00
2.00
0.00
INDUCTANCE(μH)
TEMP. RISE(℃)
1 2 3 4 5 6
DC BIAS (Amps)

Reliability:

Item	Test Method	Specification and Requirement
Solderability	Solder heat proof : 1.Preheating: 160 10°C for 90 seconds 2.Retention time: 245 5 for 2 0.5 seconds	The surface of terminal immersed shall be minimum of 95% covered with a new coating of solder.
Vibration	1.Vibration frequency: (10Hz to 55Hz to10Hz) in 60 seconds as a period 2.Vibration time: period cycled for 2 hours in each of 3 mutual perpendicular directions 3.Amplitude: 1.5mm max.	$\Delta L/L_0 \leq$ 5% No mechanical damage such as break.
Shock	1.Peak value: 100 G 2.Duration of pulse: 11ms 3.3 times in each positive and negative direction of 3 mutual perpendicular directions	

Reliability:

Item	Test Method	Specification and Requirement
Thermal Shock	1.Repeat 100 cycle as follow: (-55 2°C,30 3minutes) (Room temperature, 5 minutes) (+125 2°C,30 3minutes) (Room temperature, 5 minutes) 2.Recovery: 48 + 4 / - 0 hours	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