

Power Inductor AEC-Q200

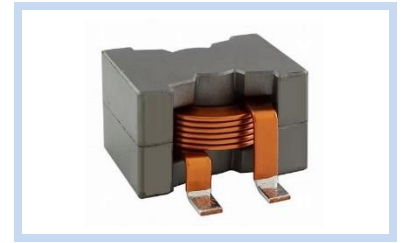
Flat Wire Type 27.9x19.7mm

PIF-271xM7S Series

MERITEK

FEATURE

- Superior Quality for an Automotive Product Line
- Compliant with RoHS and Halogen Free
- Application: DC/DC Converter in Power Regulation System, PV Inverters
- AEC-Q200 Compliance



ELECTRICAL CHARACTERISTICS

Part Number	Inductance $\pm 10\%$ (μH)	DCR $\pm 10\%$ (m Ω)	Temperature Rise Current (A)	Saturation Current (A)	Total Height Max (mm)
PIF2R2K2714M7S	2.2	1.83	30	> 100.0	14.22
PIF2R2K2714LM7S	2.2	1.50	30	84.8	14.22
PIF3R3K2714M7S	3.3	1.83	30	68.4	14.22
PIF3R3K2714LM7S	3.3	1.50	30	57.0	14.22
PIF4R7K2714M7S	4.7	1.83	30	50.1	14.22
PIF4R7K2714LM7S	4.7	1.50	30	39.0	14.22
PIF6R8K2714M7S	6.8	1.83	30	36.2	14.22
PIF6R8K2714LM7S	6.8	1.50	30	27.8	14.22
PIF100K2714M7S	10.0	1.83	30	23.4	14.22
PIF100K2714LM7S	10.0	1.50	30	17.6	14.22
PIF150K2714M7S	15.0	1.83	30	15.2	14.22
PIF150K2714LM7S	15.0	1.50	30	11.0	14.22
PIF220K2714M7S	22.0	1.83	30	9.6	14.22
PIF220K2714LM7S	22.0	1.50	30	6.8	14.22
PIF330K2714M7S	33.0	1.83	30	5.9	14.22
PIF330K2714LM7S	33.0	1.50	30	3.3	14.22
PIF3R3K2717M7S	3.3	2.45	28	93.6	17.00
PIF4R7K2717M7S	4.7	2.45	28	62.4	17.00
PIF6R8K2717M7S	6.8	2.45	28	45.9	17.00
PIF100K2717M7S	10.0	2.45	28	32.1	17.00
PIF150K2717M7S	15.0	2.45	28	21.5	17.00
PIF220K2717M7S	22.0	2.45	28	14.5	17.00
PIF330K2717M7S	33.0	2.45	28	9.3	17.00
PIF350K2717M7S	35.0	9.00 MAX	16	18.5	17.50
PIF500K2717M7S	50.0	10.50	15	15.0	18.00
PIF100K2719M7S	10.0	3.45	28	41.0	18.80

Note:

1. Test frequency: 500 KHZ, 0.1Vrms.
2. $\Delta T=40^{\circ}\text{C}$ approximately under the temperature rise current
3. The saturation current indicates the value of DC current is approximately 30% lower than its initial value of inductance.
4. Operation temperature range $-40^{\circ}\text{C} \sim 125^{\circ}\text{C}$

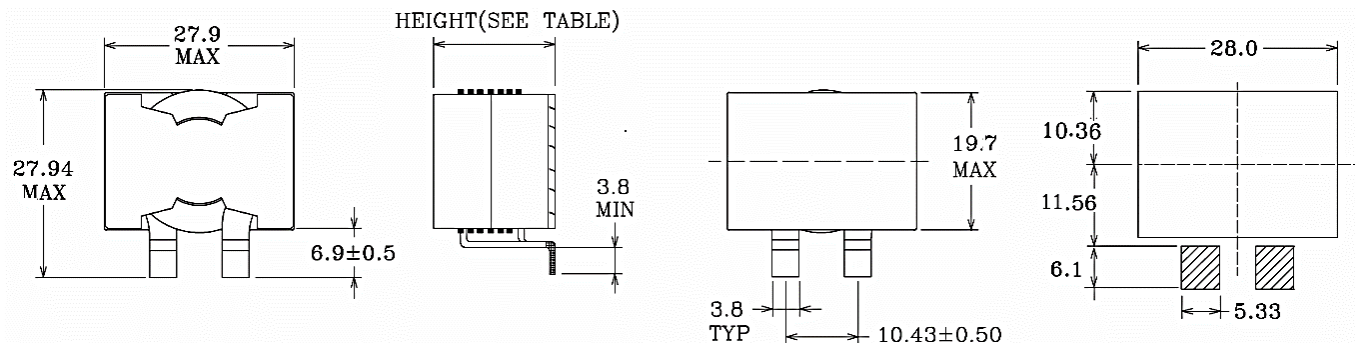
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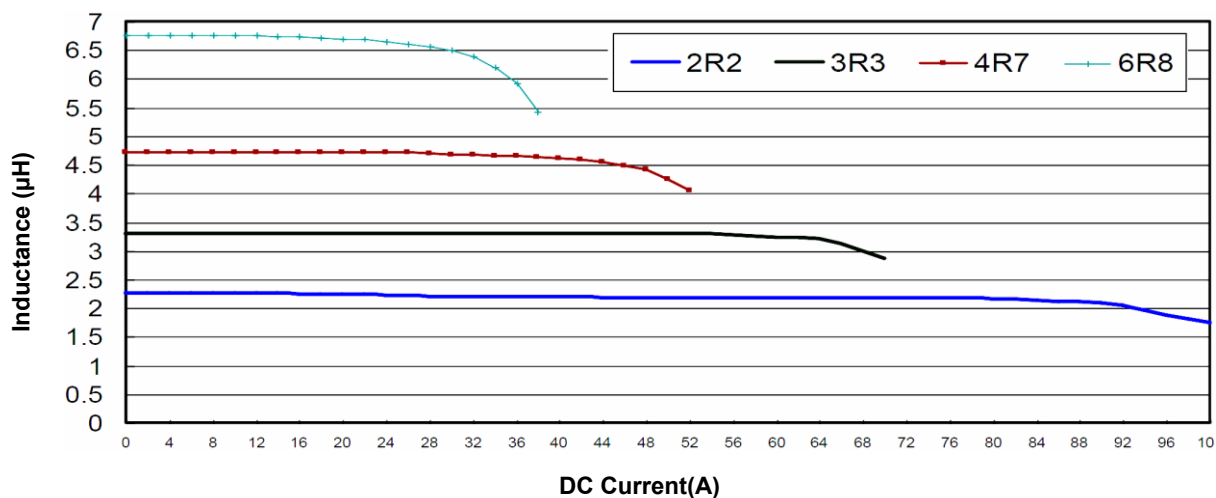
DIMENSIONS



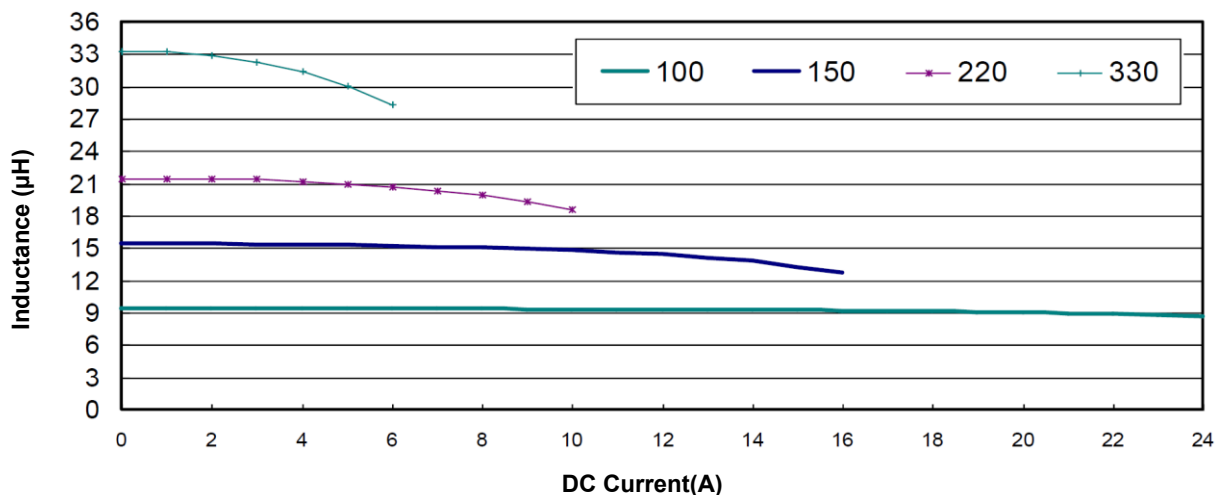
Unit: mm

CHARACTERISTICS CURVE

Inductance vs DC Bias Current - PIF-27147S series



Inductance vs DC Bias Current - PIF-27147S series



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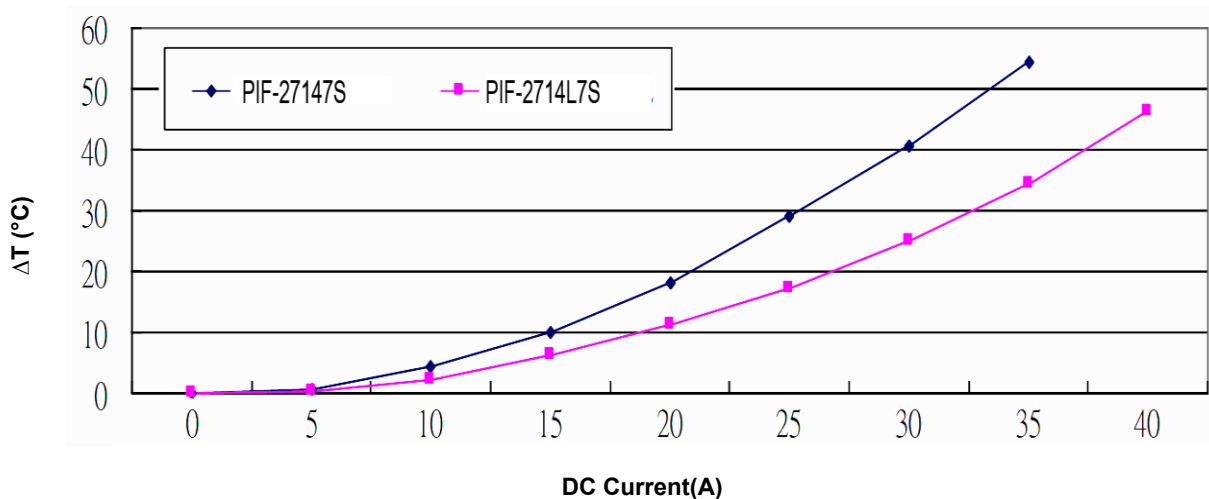
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PIF-271xM7S Series

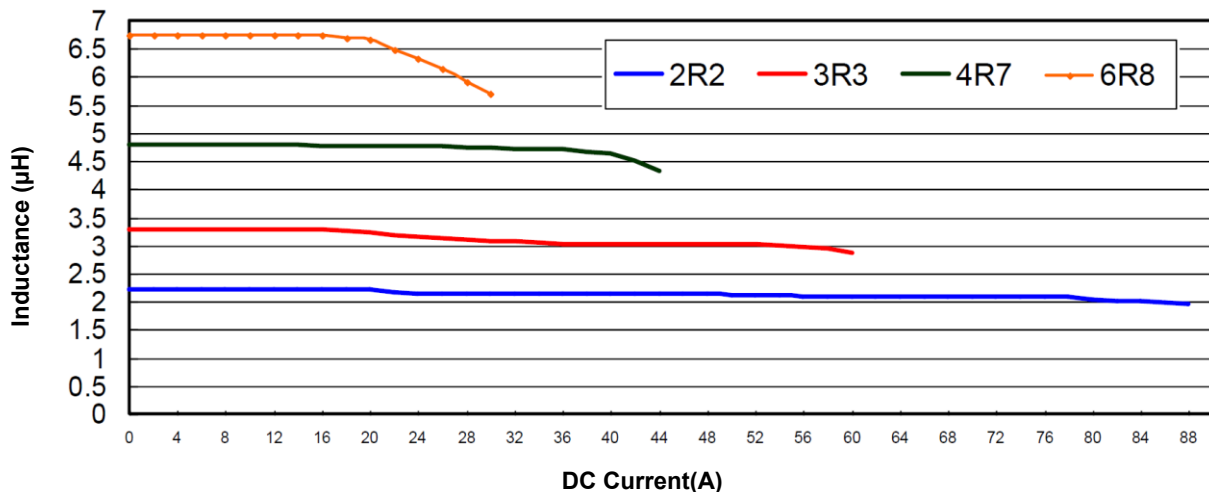
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CHARACTERISTICS CURVE

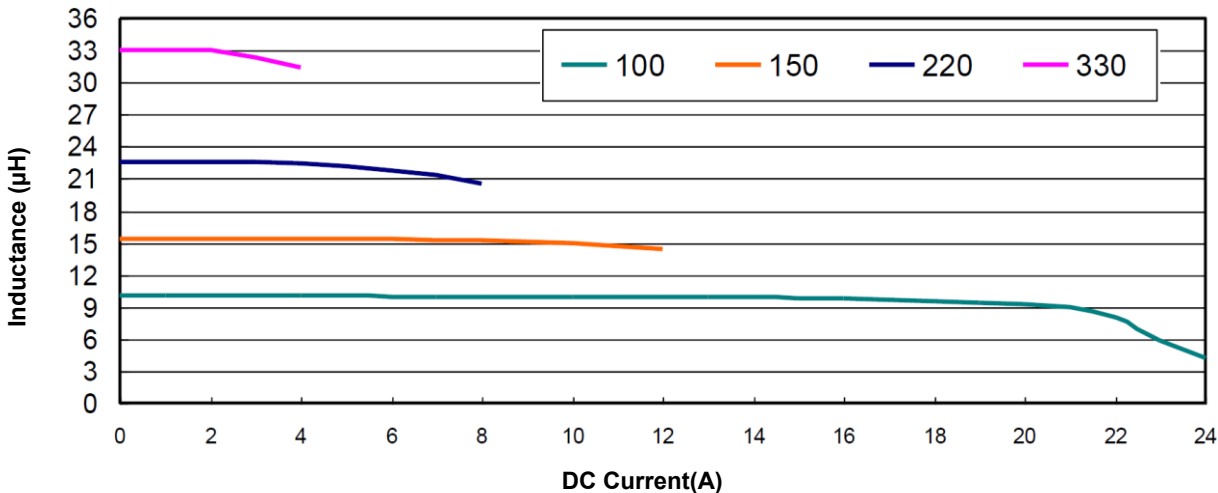
Temperature Rise vs DC Bias – PIF-27147S series



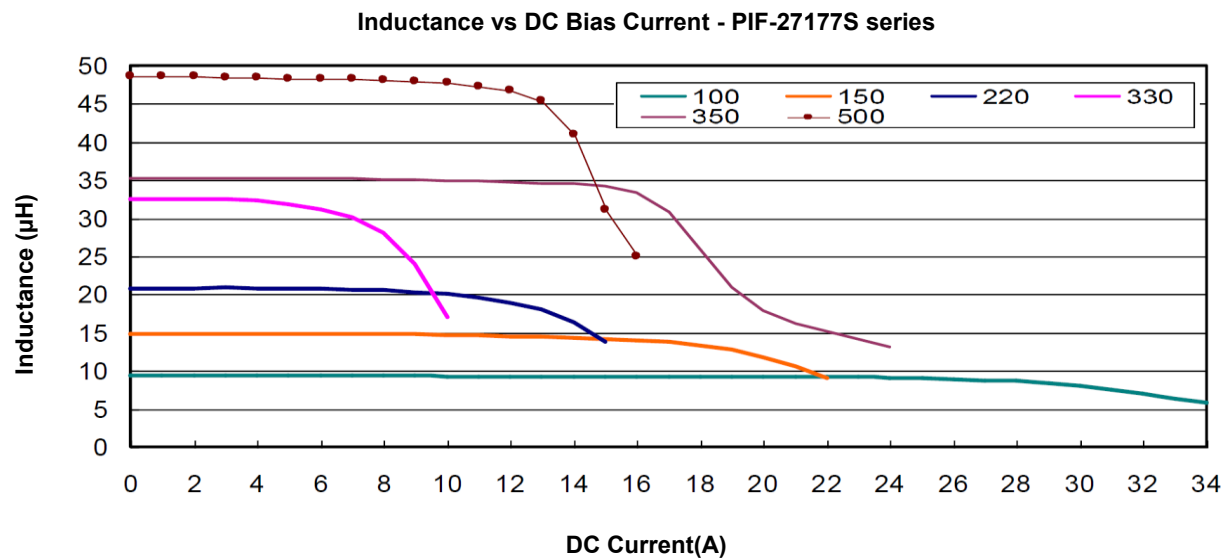
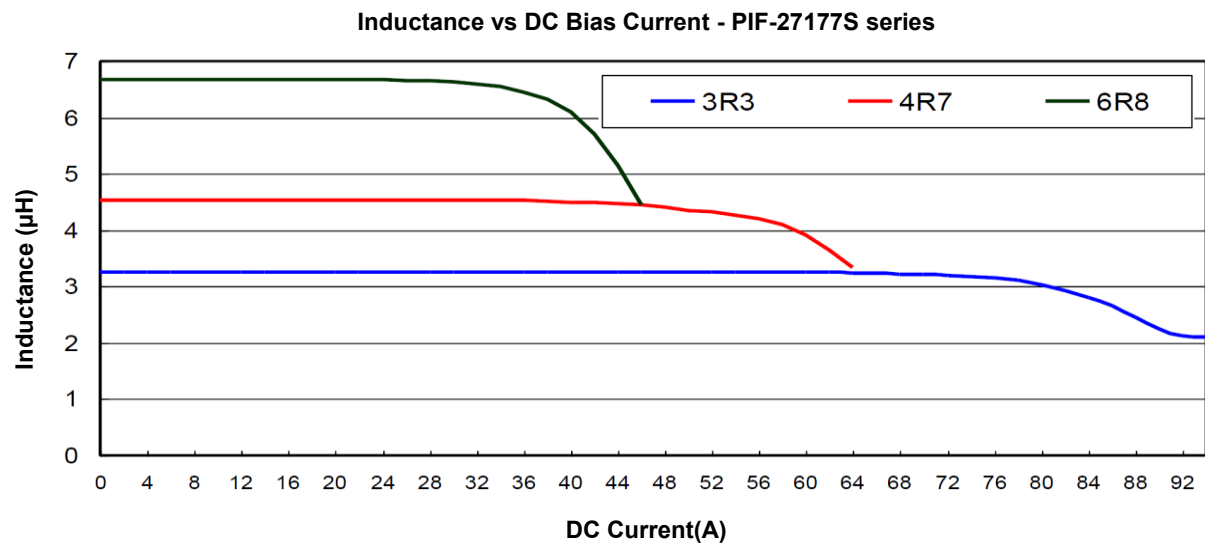
Inductance vs DC Bias Current - PIF-2714L7S series



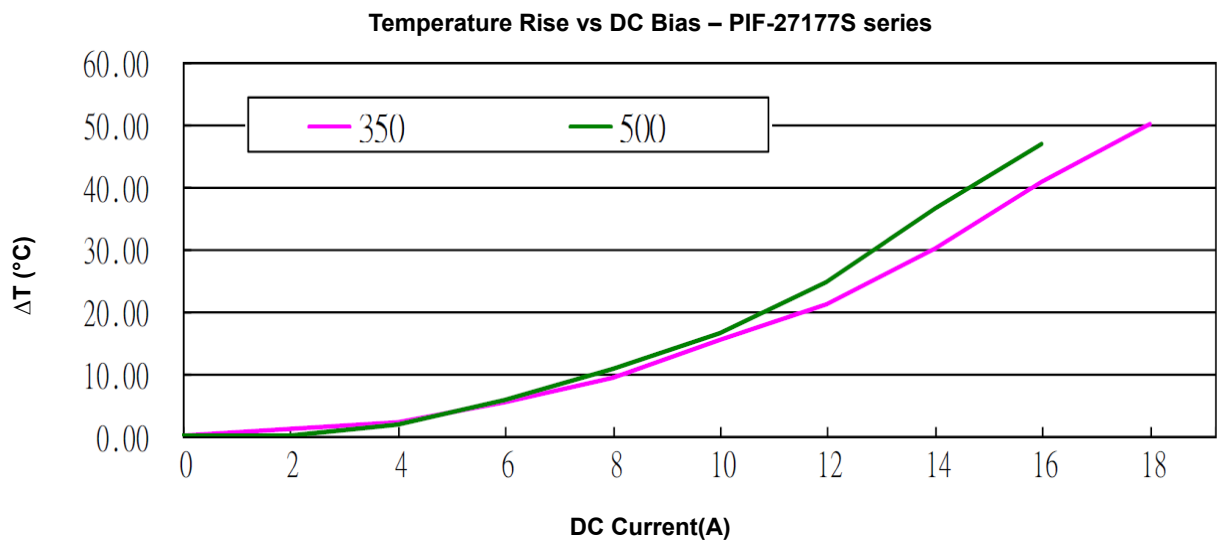
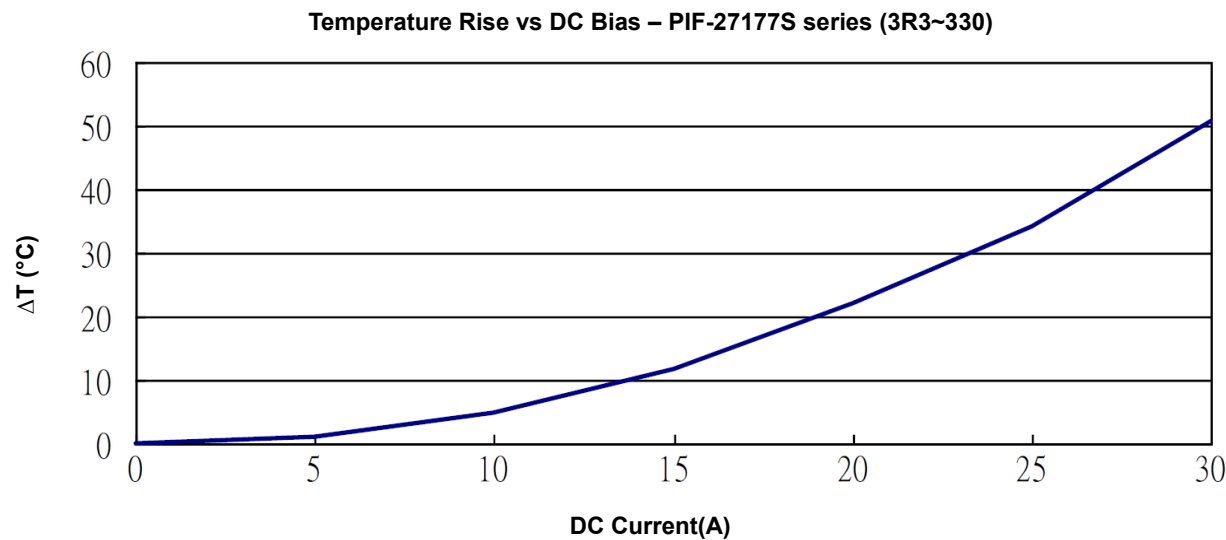
Inductance vs DC Bias Current - PIF-2714L7S series



CHARACTERISTICS CURVE



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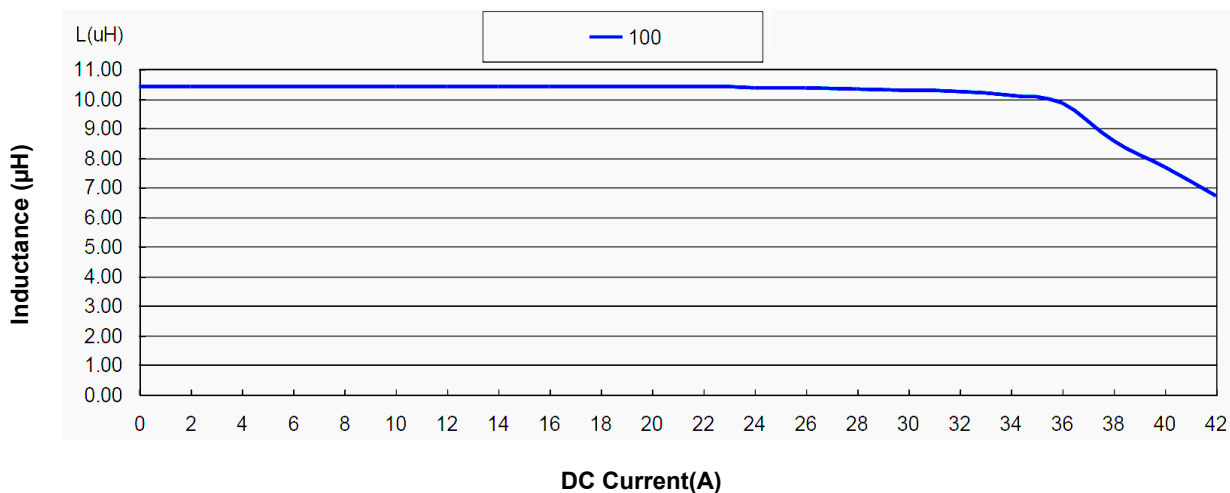
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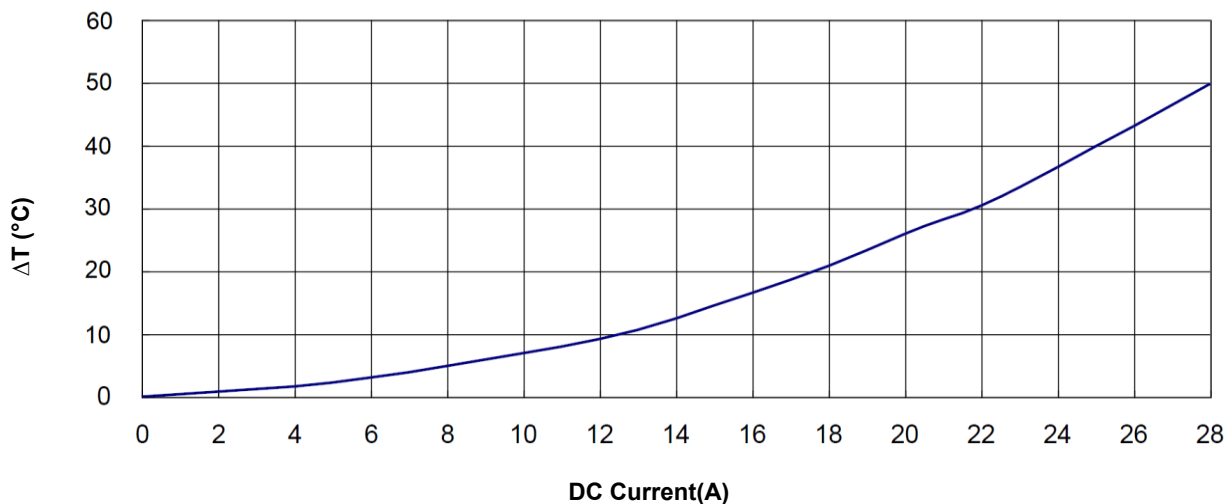
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CHARACTERISTICS CURVE

Inductance vs DC Bias Current – PIF-2719S series



Temperature Rise vs DC Bias – PIF-2719S series



PART NUMBERING SYSTEM

PIF 2R2K 2714 M7S
(1) (2) (3) (4)

No	Item	Code	Description
(1)	Product Code	PIF	Power Inductor Series, Flat Wire type
(2)	Inductance	2R2K	2R2: 2.20uH ± 10% 1R2: 1.2uH, 2R0: 2.0uH
(3)	Size Code	2714	27.9 x 14.22mm, L x T (mm) 2717: 27.9 x 17mm, 2719: 27.9 x 18.8mm
(4)	Series Code	M7S	SMD 2T High Current Series AEC-Q200

*Specifications subject to change without notice.