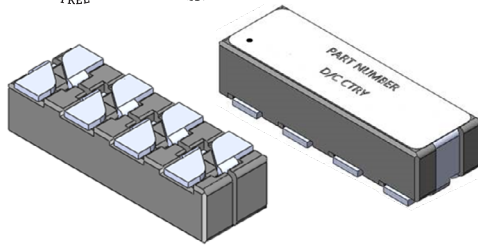


# Power Beads - PGL725XHLT Series Coupled Inductor



## Features and Benefits:

- Ⓢ High current multi-phase coupled inductor
- Ⓢ Max height 6mm
- Ⓢ Ferrite core material
- Ⓢ Operating frequency range: ~3MHz
- Ⓢ For use with ADI/Maxim Integrated Products Multi - Phase Controllers

## Electrical Specifications @ 25°C - Operating Temperature -40°C to +125°C

Part Number	Heating current per phase (A)	OCL @ 0 Ade (nH±20%)				OCL @ Isat 1&2 (nH MIN)	Isat1 @ 25°C (A)	*Isat2 @ 105°C (A TYP)	DCR (mΩ) Max.	SCL @ 0 Adc (nH)	SCL @ Isat 3 (nH MIN)	Isat3 @ 105°C (A)
		PHASE 1 2-1	PHASE 2 4-3	PHASE 3 6-5	PHASE 4 8-7							
PGL7252HLT	40	170	170	\	\	110	24	20	0.25	35±20%	22	*100
PGL7253HLT	40	170	180	170	\	110	24	20	0.25	35±20%	22	*100
PGL7254HLT	40	170	180	180	170	110	24	20	0.25	35±20%	22	*100

### Notes:

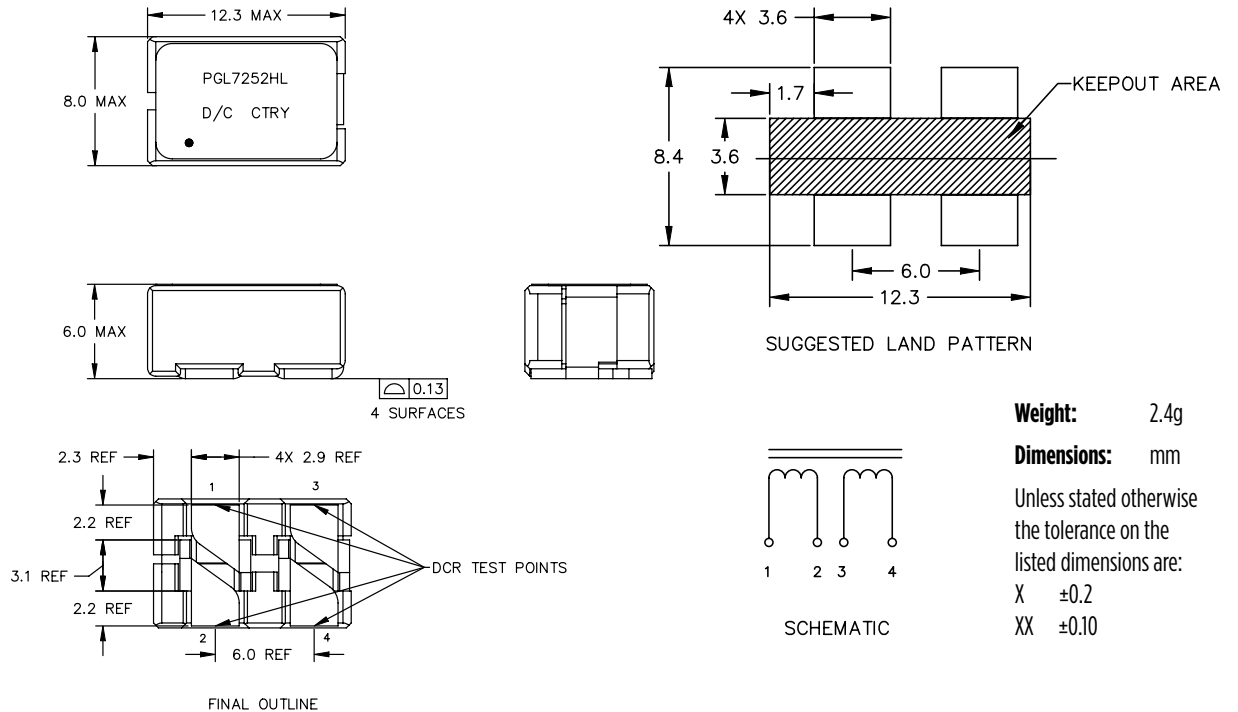
- Open circuit inductance (OCL) test parameters: 1MHz, 0.1V, 0Adc.
- Isat 1 & Isat 2 for OCL, Isat 3 for SCL are the DC current which cause the inductance drops by 20% TYP.
- Short circuit inductance (SCL):
  - PGL7252HLT: Measure (2-3) with shorted (1,4), and divide by 2.
  - PGL7253HLT: Measure (2-5) with shorted (1,4), (3,6), and divide by 3.
  - PGL7254HLT: Measure (2-7) with shorted (1,4), (3,6), (5,8) and divide by 4.
- The items on indicated \* are guaranteed by design and verified by design stage. Will not test for production.
- The heating current, or rms current, per phase is calculated to produce a 45°C rise above the ambient temperature.
- In high volt\*time applications, additional heating in the component can occur due to core losses in the inductor which may necessitate derating the current in order to limit the temperature rise of the component. To determine the approximate total losses (or temperature rise) for a given application, the coreloss and temperature rise curves can be used.
- The temperature of the component (ambient plus temperature rise) must be within the stated operating range.
- Optional tape and reel packaging can be ordered by adding a T suffix to the part-number (ie: PGL7252HL becomes PGL7252HLT). Pulse complies to the industry standard tape and reel specification EIA481.

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## MECHANICALS

## SCHEMATIC

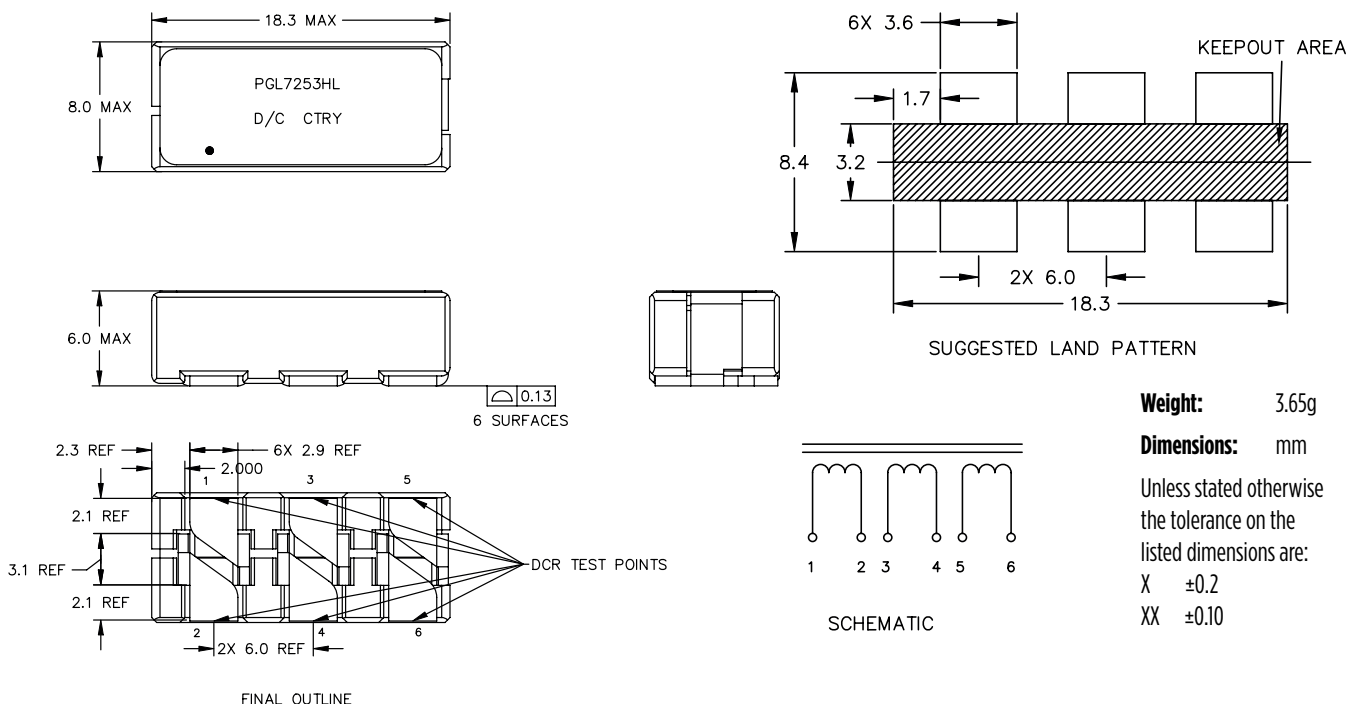
### PGL7252HLT



## MECHANICALS

## SCHEMATIC

### PGL7253HLT

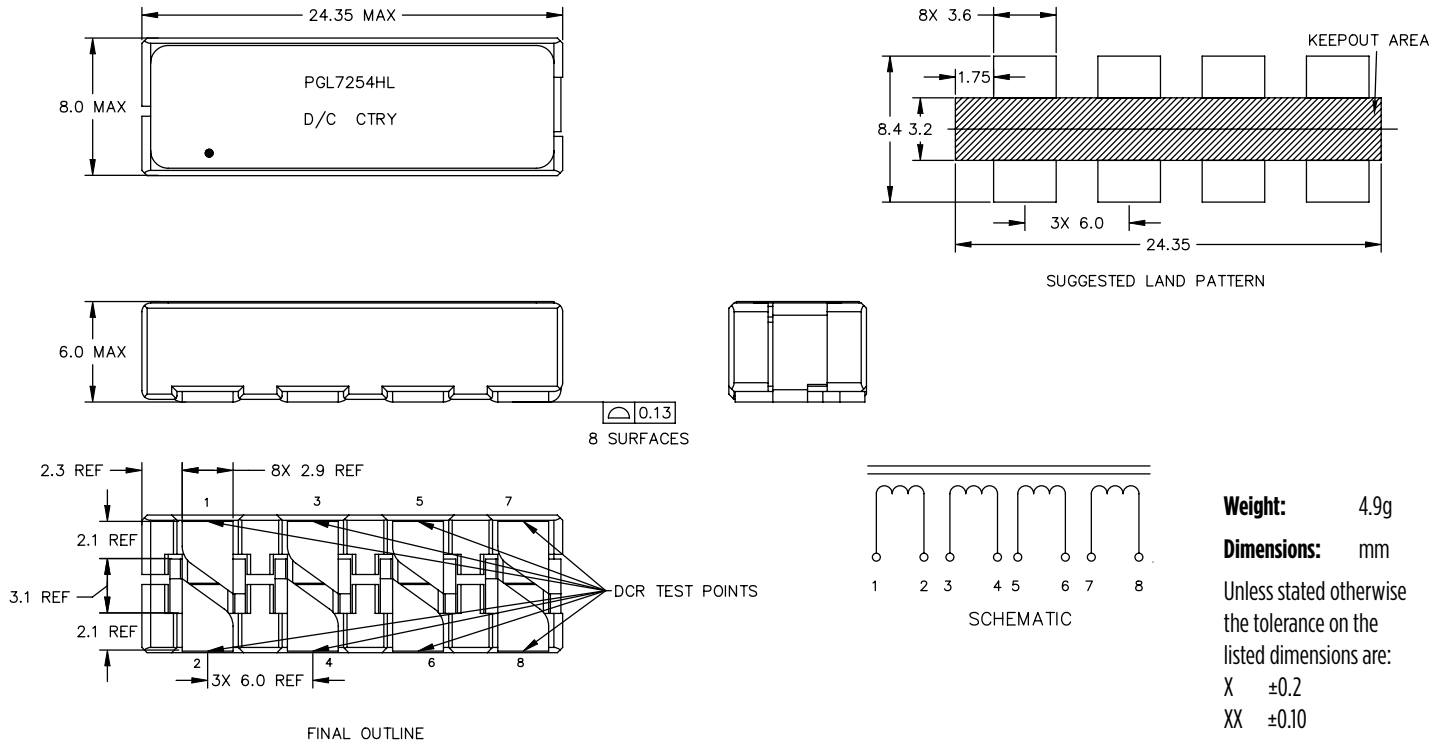


# Power Beads - PGL725XHLT Series Coupled Inductor

## MECHANICALS

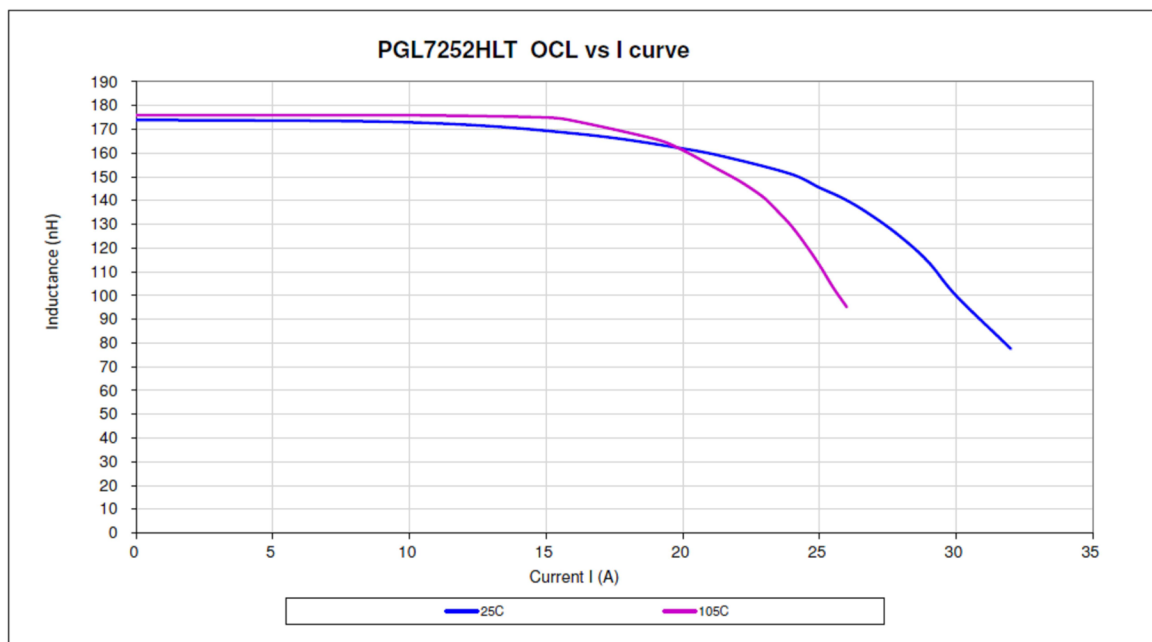
## SCHEMATIC

### PGL7254HLT



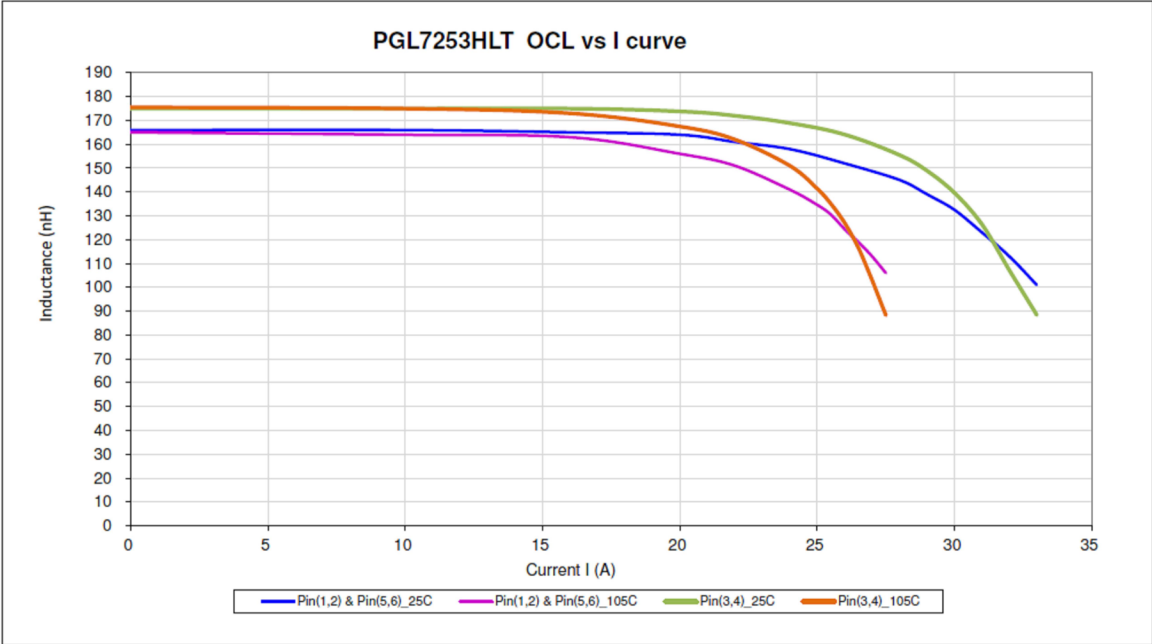
## OCL vs I curve

### PGL7252HLT



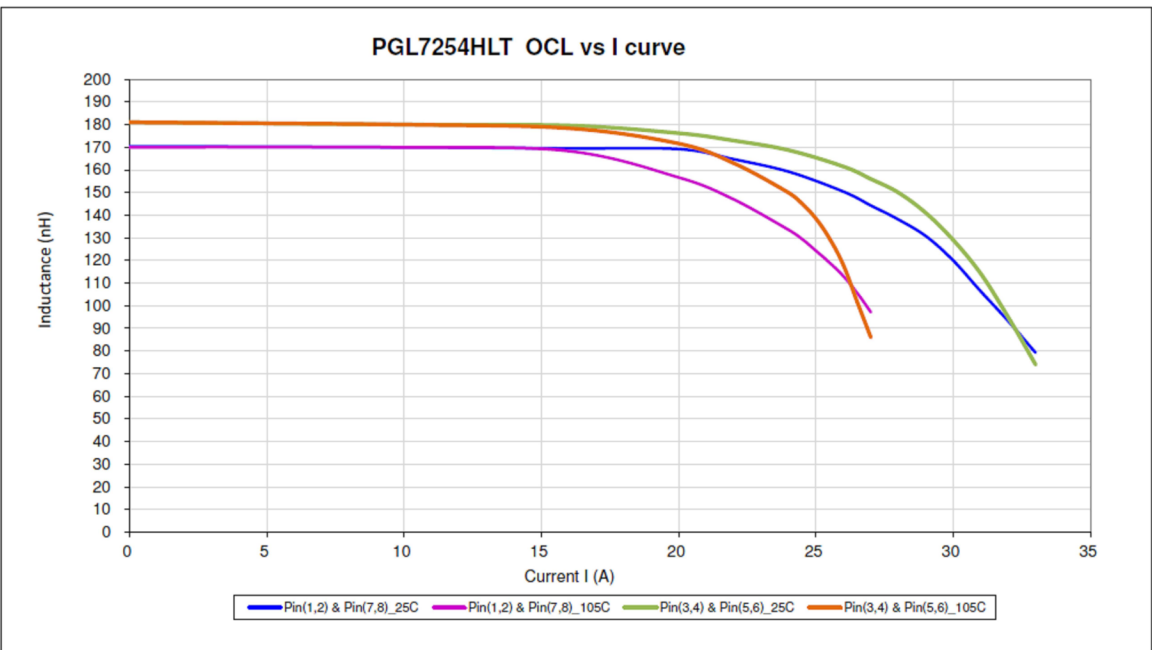
OCL vs I curve

PGL7253HLT



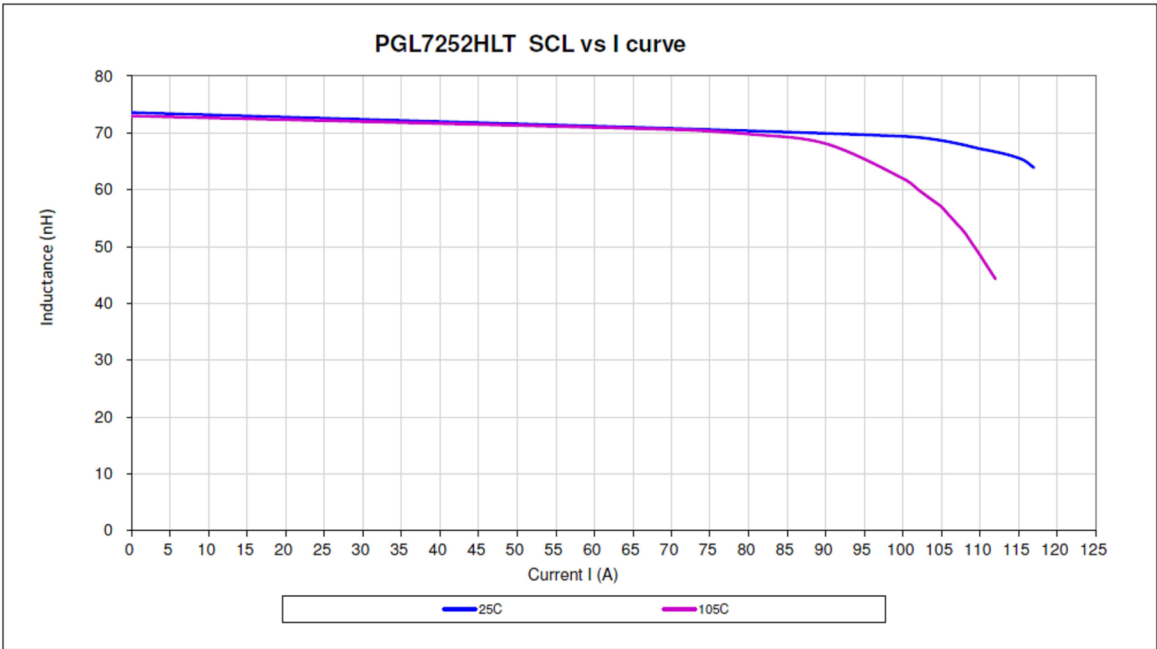
OCL vs I curve

PGL7254HLT



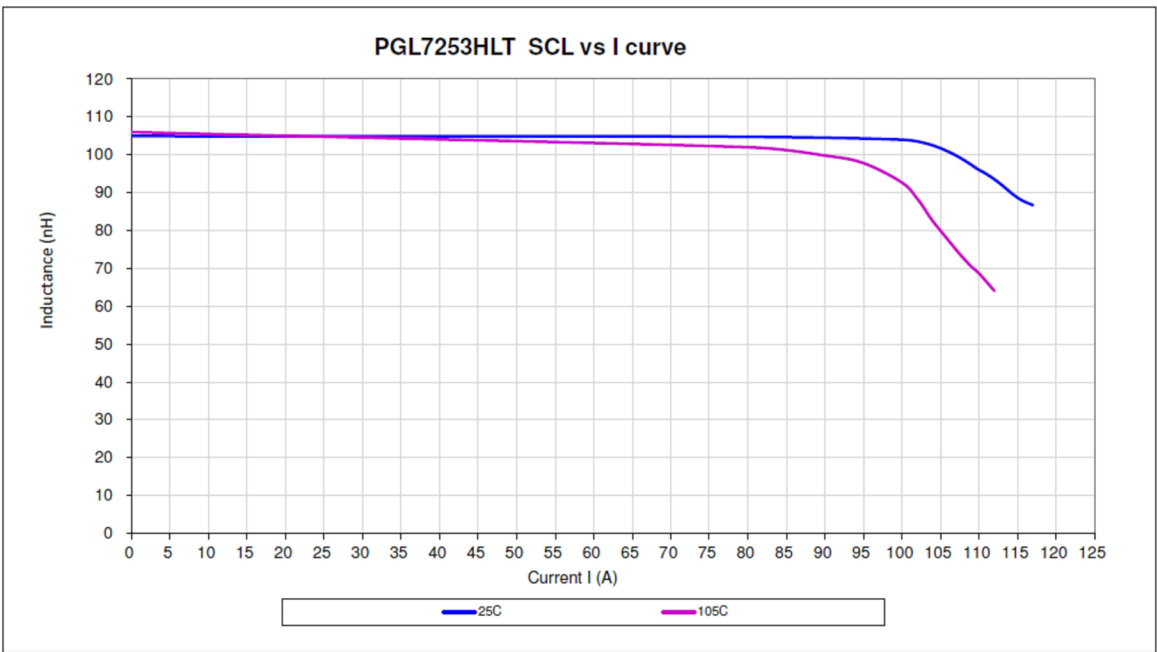
SCL vs I curve

PGL7252HLT



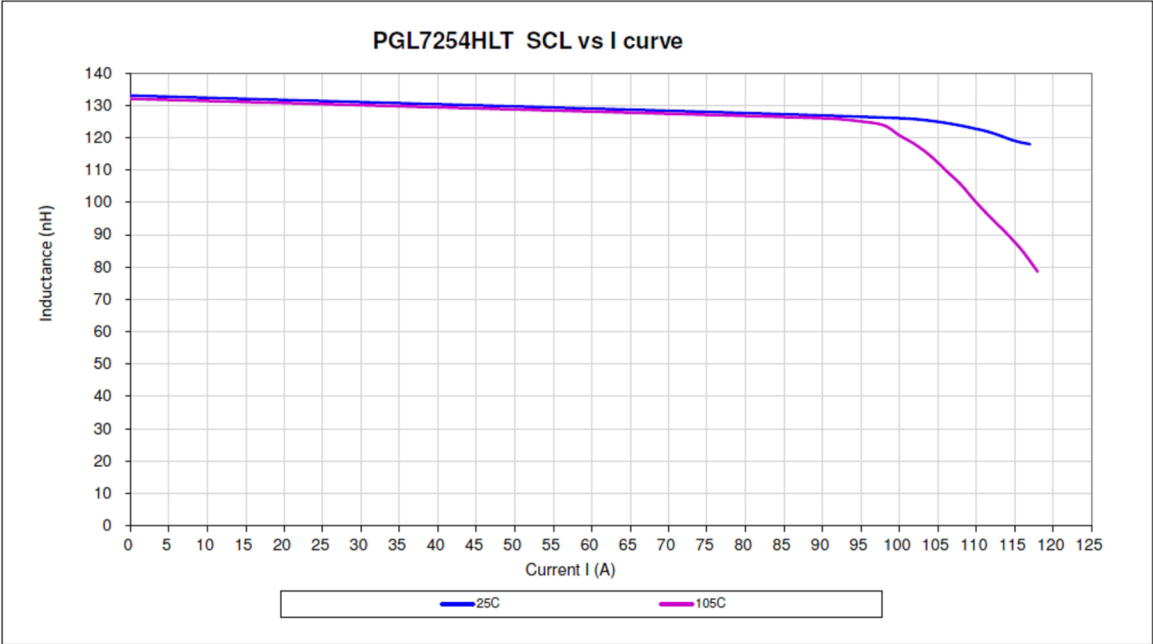
SCL vs I curve

PGL7253HLT



SCL vs I curve

PGL7254HLT



## PGL725XHLT



### For More Information:

Americas - [prodinfo\\_power\\_americas@yageo.com](mailto:prodinfo_power_americas@yageo.com) | Europe - [prodinfo\\_power\\_emea@yageo.com](mailto:prodinfo_power_emea@yageo.com) | Asia - [prodinfo\\_power\\_asia@yageo.com](mailto:prodinfo_power_asia@yageo.com)

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