TDK SMD Power Inductor Comparison Data:

(SLF7045T-PF, SLF10145T-PF, SLF12565T-PF, SLF12575T-PF) vs. (SLF7045T-H, SLF10145T-H, SLF12565T-H, SLF12575T-H)

Characteristic	SLF7045T-xxx-PF	SLF7045T-xxx-H	Comments
Operating temperature:	-20C to +85C (including self-temperature rise)	-40C to +125C (including self-temperature rise)	-H has a higher operating temperature
Self temperature rise:	Typical: +20C	Typical: +20C	same
Storage temperature:	-40C to +85C	-40C to +125C	-H has a higher storage temperature
Inductance range:	3.3uH to 1000uH	3.3uH to 330uH; no 470, 680 or 1000uH values	-H offers a narrower inductance range
Rated current:	ldc1: value when L value has dropped -10%	Idc1: value when L value has dropped -10%	same
	Idc2: when part temperature has risen +20C	Idc2: when part temperature has risen +20C	same
	Whichever is smaller	(Whichever is smaller)	-
Characteristic	SLF10145T-xxx-PF	SLF10145Txxx-H	Comments
Operating temperature:	-20C to +90C (including self-temperature rise)	-40C to +125C (including self-temperature rise)	-H has a higher operating temperature
Self temperature rise:	Typical: +30C	Typical: +30C	same
Storage temperature:	-40C to +90C	-40C to +125C	-H has a higher storage temperature
Inductance range:	3.3uH to 1500uH	3.3uH to 1500uH	same
Rated current:	ldc1: value when L value has dropped -10%	Idc1: value when L value has dropped -10%	same
	Idc2: when part temperature has risen +30C	Idc2: when part temperature has risen +30C	same
	(Whichever is smaller)	(Whichever is smaller)	-
Characteristic	SLF12565T-xxx-PF	SLF12565T-xxx-H	Comments
Characteristic Operating temperature:	SLF12565T-xxx-PF -20C to +105C (including self-temperature rise)	SLF12565T-xxx-H -40C to +125C (including self-temperature rise)	Comments -H has a higher operating temperature
Operating temperature:	-20C to +105C (including self-temperature rise)	-40C to +125C (including self-temperature rise)	-H has a higher operating temperature
Operating temperature: Self temperature rise:	-20C to +105C (including self-temperature rise) Typical: +40C	-40C to +125C (including self-temperature rise) Typical: +40C	-H has a higher operating temperature same
Operating temperature: Self temperature rise: Storage temperature:	-20C to +105C (including self-temperature rise) Typical: +40C -40C to +105C	-40C to +125C (including self-temperature rise) Typical: +40C -40C to +125C	-H has a higher operating temperature same -H has a higher storage temperature
Operating temperature: Self temperature rise: Storage temperature: Inductance range:	-20C to +105C (including self-temperature rise) Typical: +40C -40C to +105C 2uH to 220uH	-40C to +125C (including self-temperature rise) Typical: +40C -40C to +125C 2uH to 220uH	-H has a higher operating temperature same -H has a higher storage temperature same
Operating temperature: Self temperature rise: Storage temperature: Inductance range:	-20C to +105C (including self-temperature rise) Typical: +40C -40C to +105C 2uH to 220uH Idc1: value when L value has dropped -10%	-40C to +125C (including self-temperature rise) Typical: +40C -40C to +125C 2uH to 220uH Idc1: value when L value has dropped -10%	-H has a higher operating temperature same -H has a higher storage temperature same same
Operating temperature: Self temperature rise: Storage temperature: Inductance range:	-20C to +105C (including self-temperature rise) Typical: +40C -40C to +105C 2uH to 220uH Idc1: value when L value has dropped -10% Idc2: when part temperature has risen +40C	-40C to +125C (including self-temperature rise) Typical: +40C -40C to +125C 2uH to 220uH Idc1: value when L value has dropped -10% Idc2: when part temperature has risen +40C	-H has a higher operating temperature same -H has a higher storage temperature same same
Operating temperature: Self temperature rise: Storage temperature: Inductance range: Rated current:	-20C to +105C (including self-temperature rise) Typical: +40C -40C to +105C 2uH to 220uH Idc1: value when L value has dropped -10% Idc2: when part temperature has risen +40C (Whichever is smaller)	-40C to +125C (including self-temperature rise) Typical: +40C -40C to +125C 2uH to 220uH Idc1: value when L value has dropped -10% Idc2: when part temperature has risen +40C (Whichever is smaller)	-H has a higher operating temperature same -H has a higher storage temperature same same same
Operating temperature: Self temperature rise: Storage temperature: Inductance range: Rated current: Characteristic	-20C to +105C (including self-temperature rise) Typical: +40C -40C to +105C 2uH to 220uH Idc1: value when L value has dropped -10% Idc2: when part temperature has risen +40C (Whichever is smaller)	-40C to +125C (including self-temperature rise) Typical: +40C -40C to +125C 2uH to 220uH Idc1: value when L value has dropped -10% Idc2: when part temperature has risen +40C (Whichever is smaller) SLF12575T-xxx-H	-H has a higher operating temperature same -H has a higher storage temperature same same
Operating temperature: Self temperature rise: Storage temperature: Inductance range: Rated current: Characteristic Operating temperature:	-20C to +105C (including self-temperature rise) Typical: +40C -40C to +105C 2uH to 220uH Idc1: value when L value has dropped -10% Idc2: when part temperature has risen +40C (Whichever is smaller) SLF12575T-xxx-PF -20C to +105C (including self-temperature rise)	-40C to +125C (including self-temperature rise) Typical: +40C -40C to +125C 2uH to 220uH Idc1: value when L value has dropped -10% Idc2: when part temperature has risen +40C (Whichever is smaller) SLF12575T-xxx-H -40C to +125C (including self-temperature rise)	-H has a higher operating temperature same -H has a higher storage temperature same same - same - Comments -H has a higher operating temperature
Operating temperature: Self temperature rise: Storage temperature: Inductance range: Rated current: Characteristic Operating temperature: Self temperature rise:	-20C to +105C (including self-temperature rise) Typical: +40C -40C to +105C 2uH to 220uH Idc1: value when L value has dropped -10% Idc2: when part temperature has risen +40C (Whichever is smaller) SLF12575T-xxx-PF -20C to +105C (including self-temperature rise) Typical: +40C	-40C to +125C (including self-temperature rise) Typical: +40C -40C to +125C 2uH to 220uH Idc1: value when L value has dropped -10% Idc2: when part temperature has risen +40C (Whichever is smaller) SLF12575T-xxx-H -40C to +125C (including self-temperature rise) Typical: +40C	-H has a higher operating temperature same -H has a higher storage temperature same same
Operating temperature: Self temperature rise: Storage temperature: Inductance range: Rated current: Characteristic Operating temperature: Self temperature rise: Storage temperature:	-20C to +105C (including self-temperature rise) Typical: +40C -40C to +105C 2uH to 220uH Idc1: value when L value has dropped -10% Idc2: when part temperature has risen +40C (Whichever is smaller) SLF12575T-xxx-PF -20C to +105C (including self-temperature rise) Typical: +40C -40C to +105C	-40C to +125C (including self-temperature rise) Typical: +40C -40C to +125C 2uH to 220uH Idc1: value when L value has dropped -10% Idc2: when part temperature has risen +40C (Whichever is smaller) SLF12575T-xxx-H -40C to +125C (including self-temperature rise) Typical: +40C -40C to +125C	-H has a higher operating temperature same -H has a higher storage temperature same same - Comments -H has a higher operating temperature same -H has a higher storage temperature
Operating temperature: Self temperature rise: Storage temperature: Inductance range: Rated current: Characteristic Operating temperature: Self temperature rise: Storage temperature: Inductance range:	-20C to +105C (including self-temperature rise) Typical: +40C -40C to +105C 2uH to 220uH Idc1: value when L value has dropped -10% Idc2: when part temperature has risen +40C (Whichever is smaller) SLF12575T-xxx-PF -20C to +105C (including self-temperature rise) Typical: +40C -40C to +105C 1.2uH to 220uH	-40C to +125C (including self-temperature rise) Typical: +40C -40C to +125C 2uH to 220uH Idc1: value when L value has dropped -10% Idc2: when part temperature has risen +40C (Whichever is smaller) SLF12575T-xxx-H -40C to +125C (including self-temperature rise) Typical: +40C -40C to +125C 1.2uH to 330uH (330uH added)	-H has a higher operating temperature same -H has a higher storage temperature same same - Comments -H has a higher operating temperature same -H has a higher storage temperature -H offers a wider inductance range

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SLF-H power inductors offer a higher operating temperature than the -PF series. Typical applications include Automotive, Notebook PC, DC-DC Converter, etc..