

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:	Idc1: 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	SLF10145T-xxx-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:	Idc1: 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
Operating temperature:	-20C to +105C (including self-temperature rise)	-40C to +125C (including self-temperature rise)	-H has a higher operating temperature
Self temperature rise:	Typical: +40C	Typical: +40C	same
Storage temperature:	-40C to +105C	-40C to +125C	-H has a higher storage temperature
Inductance range:	2uH to 220uH	2uH to 220uH	same
Rated current:	Idc1: value when L value has dropped -10%	Idc1: value when L value has dropped -10%	same
	Idc2: when part temperature has risen +40C	Idc2: when part temperature has risen +40C	same
	(Whichever is smaller)	(Whichever is smaller)	-
Characteristic	SLF12575T-xxx-PF	SLF12575T-xxx-H	Comments
Operating temperature:	-20C to +105C (including self-temperature rise)	-40C to +125C (including self-temperature rise)	-H has a higher operating temperature
Self temperature rise:	Typical: +40C	Typical: +40C	same
Storage temperature:	-40C to +105C	-40C to +125C	-H has a higher storage temperature
Inductance range:	1.2uH to 220uH	1.2uH to 330uH (330uH added)	-H offers a wider inductance range
Rated current:	Idc1: 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)	-

wg112905

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