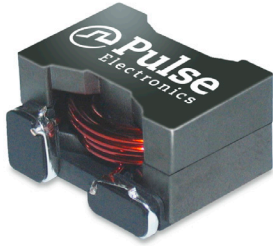


SMT POWER INDUCTORS

Wire Wound



- Current Rating:** Over 22Apk
- Finish is Tin/Lead** (Sn63/Pb37)
- MSL:** 1
- Max Reflow Temperature:** 235°C

Electrical Specifications @ 25°C — Operating Temperature -55°C to +130°C

Part Number	Inductance @0A _{DC} (μH±10%)	Inductance @I _{rated} (μH TYP)	I _{rated} ¹ (A _{DC})	DCR (mΩ ±10%)	Saturation ² Current I _{sat} (A TYP)		Heating Current I _{hc} (A TYP)	Core Loss Factor K _Z
					25°C	100°C		
PL2058	10.2	10.2	12.5	5.8	16	15	12.5	206

Notes:

- The rated current as listed is either the saturation current or the heating current depending on which value is lower.
- The saturation current is the typical current which causes the inductance to drop by 20% at the stated ambient temperatures (25°C and 100°C). This current is determined by placing the component in the specified ambient environment and applying a short duration pulse current (to eliminate self-heating effects) to the component.
- The heating current is the DC current which causes the part temperature to increase by approximately 40°C.
- 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 formula can be used:

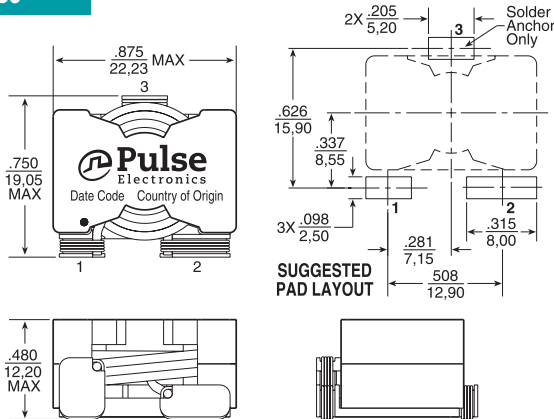
$$\Delta B \text{ (Gauss)} = K_2 * \Delta I$$

$$\text{Core Loss (W)} = 1.5E-13 * (\text{Freq_kHz})^{1.65} * \Delta B^{2.62}$$

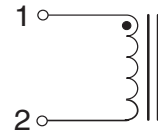
- The temperature of the component (ambient plus temperature rise) must be within the stated operating temperature range.
- RoHS compliant version available (add suffix NL to the part number).

Mechanicals

PL2058



Schematics



Dimensions: Inches
mm
Unless otherwise specified,
all tolerances are ±.010
0,25

Weight: 13g ±4%
Height: 12.2mm Max
Footprint: 22.2 X 19.2mm Max

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