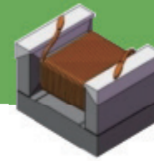


# Wire Wound Chip Ferrite Inductor –AWL -FP Series



Operating Temp : -40°C ~+125°C

- FEATURES**
- ◆ Broadband impedance characteristics
  - ◆ Good DC superimposition characteristics
  - ◆ Efficient transmission signal
  - ◆ The range of filter video noise from MHz to GHz
  - ◆ High saturation current, low DCR
  - ◆ Small size and thin form factor
  - ◆ AEC-Q200 verified

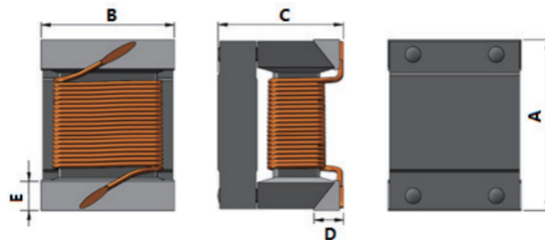
**APPLICATIONS** ◆ PoC line for automotive camera system

**PRODUCT IDENTIFICATION**



<b>1</b>	Type	A	Automotive
<b>2</b>	Type	WL	Wire Wound Chip Inductor
<b>3</b>	External Dimensions (L×W) (mm)	3225	3.2×2.5
<b>4</b>	Material Code	F	Ferrite
<b>5</b>	Feature Type	P	High Current
<b>6</b>	Nominal Inductance	Example	Nominal Value
		2R2	2.2μH
		2R7	2.7μH
		3R3	3.3μH
		4R7	4.7μH
		100	10μH
		220	22μH
		470	47μH
<b>7</b>	Inductance Tolerance	M	±20%
<b>8</b>	HSF Products	F	Hazardous Substance Free Products
<b>9</b>	Packing	T	Tape & Reel

**SHAPE AND DIMENSIONS**



Recommended Land Pattern



Unit: mm

Series	A	B	C	D	E	H <sub>Typ.</sub>	I <sub>Typ.</sub>	J <sub>Typ.</sub>
AWL3225FP	3.2±0.2	2.5±0.2	2.3±0.2	0.30±0.10	0.58±0.10	2.5	0.9	2.2

**SPECIFICATIONS** AWL3225FP Series

Part Number	Inductance	DC Resistance	Self-resonant Frequency	Saturation Current	Heat Rating Current
	@1MHz, 1V	Max.	Min.	Max.	Max.
Units	$\mu$ H	$\Omega$	MHz	mA	mA
Symbol	L	DCR	SRF	Isat	Irms
AWL3225FP2R2MTF	2.2 $\pm$ 20%	0.19	200	1000	1000
AWL3225FP2R7MTF	2.7 $\pm$ 20%	0.22	200	975	975
AWL3225FP3R3MTF	3.3 $\pm$ 20%	0.24	150	950	950
AWL3225FP4R7MTF	4.7 $\pm$ 20%	0.28	100	850	850
AWL3225FP100MTF	10 $\pm$ 20%	0.40	100	500	700
AWL3225FP220MTF	22 $\pm$ 20%	0.62	50	400	550
AWL3225FP470MTF	47 $\pm$ 20%	0.90	30	300	500

Note: ※ 1:Rated current: Isat(Max) or Irms(Max), whichever is smaller.

※ 2:Saturation Current:

Max. Value, DC current at which the inductance drops less than 30% from its value without current;

Typ. Value, DC current at which the inductance drops approximate 30% from its value without current.

※ 3:Heat Rating Current:DC current that causes the temperature rise ( $\Delta$ T) from 20°C ambient;

For Max. Value,temperature rise ( $\Delta$ T) is 20°C.

For Typ. Value,temperature rise ( $\Delta$ T) is approximate 40°C.

The part temperature (ambient + temp. rise) should not exceed 125 °C under worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

**TYPICAL ELECTRICAL CHARACTERISTICS**

Impedance vs. Frequency

