

Shielded SMD Coupled Inductor – ACPR1208S Series



Operating Temp.: -50°C~+150°C

FEATURES

- High efficiency, high coupling
- High rated current, low DC resistance
- RoHS compatible
- AEC-Q200 verified

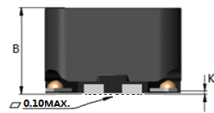
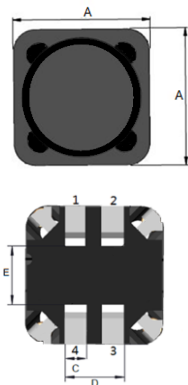
APPLICATIONS

- SEPIC, Zeta, Flyback topology, etc.
- LED , power supplies
- Used as common mode choke
- Used as transformer

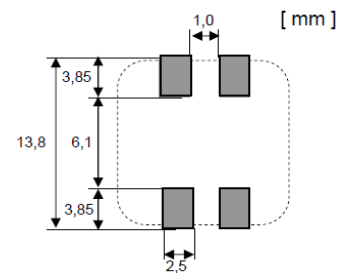
PRODUCT IDENTIFICATION

<u>A</u> ①	<u>CP</u> ②	<u>R</u> ③	<u>1208</u> ④	<u>S</u> ⑤	<u>XXX</u> ⑥	<u>M</u> ⑦	<u>T</u> ⑧
① Type				② Type			
A	Automotive	CP	for Coupled Power Inductor				
③ Structure Code				④ External Dimensions (LxW) [mm]			
R	R Structure	1208	12.0x8.0				
⑤ Feature Type				⑥ Nominal Inductance			
S	S type	Example	Nominal Value				
				XXX	1R0=1.0uH,100=10uH,101=100uH		
⑦ Inductance Tolerance				⑧ Packing			
M	±20%	T	Tape &Reel				

SHAPE AND DIMENSIONS



Recommended Land Pattern



Unit: mm

A	B	C	D	E	K
12.5Max.	8.0Max.	1.5±0.2	5.0±0.2	5.0±0.2	0.25Min.

SPECIFICATIONS

ACPR1208S Series

Part Number	Inductance	DC Resistance	Saturation Current	Heat Rating Current	HI-POT
	@0.1MHz, 0.1V	Max.	Typ.	Typ.	DC 500V/1Sec
	(P1-P3)or (P2-P4)	(P1-P3)or (P2-P4)	(P1-P3)or (P2-P4)	(P1-P3)or (P2-P4)	(P1-P3) to (P2-P4)
Units	μH	$\text{m}\Omega$	A	A	/
Symbol	L	DCR	Isat	Irms	/
ACPR1208S4R7MT	4.7 \pm 20%	25	12.9	5.0	Pass
ACPR1208S6R8MT	6.8 \pm 20%	29	11.4	4.5	Pass
ACPR1208S100MT	10 \pm 20%	36	9.8	4.1	Pass
ACPR1208S150MT	15 \pm 20%	40	7.0	3.6	Pass
ACPR1208S220MT	22 \pm 20%	72	6.7	3.0	Pass
ACPR1208S270MT	27 \pm 20%	96	5.7	2.7	Pass
ACPR1208S330MT	33 \pm 20%	105	5.2	2.5	Pass
ACPR1208S470MT	47 \pm 20%	132	4.3	2.2	Pass
ACPR1208S680MT	68 \pm 20%	206	3.6	1.8	Pass
ACPR1208S101MT	100 \pm 20%	280	3.0	1.5	Pass

Note: ※ 1: 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.
 ※ 2: Heat Rating Current: DC current that causes the temperature rise (ΔT) from 20°C ambient; For Max. Value, temperature rise (ΔT) is 20°C. For Typ. Value, temperature rise (ΔT) is approximate 40°C.

The part temperature (ambient + temp. rise) should not exceed 150 °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.

EQUIVALENT CIRCUIT

