

COMPACT SHIELDED SMD POWER INDUCTOR FOR AUTOMOTIVE

ASPIAIG-S SERIES

PRODUCT DESCRIPTION

The ASPIAIG-S6055 and ASPIAIG-S8050 are a series of shielded SMD power inductors designed for automotive, industrial and other high reliability applications requiring operation from -40°C to 125°C ambient temperatures. These inductors feature compact form factors with ASPIAIG-S6055 available with 6.0 x 6.0 x 5.5 mm and ASPIAIG-S8050 available with 8.0 x 8.0 x 5.0mm dimensions. Designed to meet the requirements of next generation DC/DC converters and switch-mode power supplies (SMPS), these inductors offer excellent size to power density tradeoffs with inductance ranging from 1μH to 470μH. The family offers saturation currents as high as 16A with guaranteed 24mΩ DCR at 25°C. Shielded construction reduces EMI. This series is TS-16949 and AEC-Q200 qualified supporting PPAP level 3.

FEATURES

- High reliability wire-wound construction
- Shielded construction reduces EMI
- Automotive grade power inductor
- TS-16949 qualified production
- PPAP level 3 support
- AEC-Q200 qualified with -40°C to 125°C operation
- High inductance up to 470 μH

APPLICATIONS

- Applications requiring high inductance value
- Automotive body electronics and comfort system
- Automotive infotainment and entertainment
- Automotive navigation
- Transportation
- Lighting, LED ballasts
- Industrial Internet of Things (IIoT)
- Industrial applications
- Solar power
- DC/DC converters and switch mode power supplies

Part Number	Inductance	DC Resistance	DC Current
	100kHz/1V	Max (25°C)	Typ
Units	μH	Ω	A
Symbol	L	DCR	Idc
ASPIAIG-S6055-XXX	3.3-330	0.026-1.603	4.60-0.60
ASPIAIG-S8050-XXX	1-470	0.010-1.540	7.20-0.55

*Example Part #: ATCA-08-680M (680 μH)