

API DELEVAN ANNOUNCES A NEW SERIES OF LED DRIVER HIGH-CURRENT INDUCTORS / LINE CHOKES

API Delevan introduces a new series of Surface Mount Device (SMD) power inductors: **5500 and 5500R** to meet the growing demand for high current LED lighting applications. API Delevan has taken our widely accepted and used DC Series of plated through hole high power chokes and designed even higher current carrying capability in a surface mount version, convenient for automated pick and place and PCB assembly processes.

Features and Benefits include:

- **High Power** density design and low-loss Ferrite Core technology provide very high Current & Power handling
- **Extreme Operating Temperature** Range of -55 to $+130$ deg C for harsh work environments. For higher operating temperature needs please consult with API Delevan engineering
- **Standard inductance values** range from $3.9 \mu\text{H}$ to 100 mH to fulfill all your circuit needs. Consult with API Delevan engineering should you have a non-standard circuit solution inductance value requirement
- **Low DC Resistance (DCR)** to minimize voltage drops and dissipated power (lost as heat) in DC-DC converter and DC biased circuit applications
- **Green Lead-free, RoHS-compliant** version (5500R) with Sn/Ag/Cu finish, or a Sn/Pb version (5500), where avoidance of Sn whiskering is critical such as in Military circuit applications
- **Inductance tolerances** of $\pm 5\%$, 10% , and 15% for highly sensitive circuit designs such as EMI line and RF filters are standard offerings. Tighter tolerance requirements are available upon request
- **High Dielectric Withstanding Voltage (DWV)** of 1000Vrms minimum, for high isolation applications
- Proven API Delevan design and manufacturing processes for rugged thermal-set epoxy molding and solder tinning lends the 5500 series products to meet the stringent requirements of **MIL-STD-202G** (Thermal shock, Mechanical Shock & vibration, Solderability) for rugged vehicular and aerospace systems

Applications for the **5500 series** include:

1. HB LED drivers, power supplies, and Incandescent replacement lamps
2. Military and Defense ground, sea, and aerospace electrical/electronic power systems

3. EMI power line filters to meet current FCC and IEC EMC emissions/susceptibility standards
4. High current SMPS, Voltage Regulators and DC-DC converters
5. Heavy Motor driver circuits
6. HID and Halogen Lighting
7. High-power RF Transceiver and Antenna systems
8. UL- and CSA- approved devices

All components are made in the USA, and full engineering support is available to assist with your design, assembly and circuit testing needs. Product is available from stock from our distribution partners; production lead-time is stock to 4 weeks ARO.

API Delevan engineering can tailor the inductor series to your exact specifications or Source Control Drawing (SCD) through our long-standing and proven application specific design process. We will optimize your needs for:

- Inductance values
- Inductance tolerances
- DC resistance values
- Part labeling
- Packaging such as custom tape and reel
- Termination materials and finishes
- Extra electrical, mechanical and environmental testing such as MIL-STD-981C.

API Delevan, an ISO9001:2008 & AS9100:2004 certified company offers the world's largest selection of magnetics, including industry standard devices, circuit solution devices and application specific devices