

# Transient Voltage Suppressors Protect Critical Equipment



Littelfuse has introduced its AK15 Series of Transient Voltage Suppressor (TVS) devices to prevent the destruction of expensive electronic gear from high-energy transients. With their 15kA (8x20  $\mu$ s pulse) surge current rating, AK15 devices provide the highest level of TVS protection available in the industry. They will be especially useful to manufacturers of mission critical equipment such as cellular telecom infrastructure apparatus, industrial transient voltage surge suppression (TVSS) systems, railway trackside signaling circuitry, highway traffic control signals, and other industrial control equipment. The AK15 Series was designed to provide protection against transients generated by nearby lightning strikes and high-level voltage surges that occur on electrical lines when large industrial equipment is switched on and off.

The AK15 Series are bi-directional devices for use in equipment connected to AC electrical lines, but are also suitable for DC circuit protection. This Series utilizes Littelfuse's exclusive Foldbak™ technology, which lowers clamping voltage levels below the TVS device's avalanche state, which provides a higher level of protection. Their sharp breakdown voltage provides a fast response to electrical line transients. A 15kA rating means that electronic OEMs no longer have to gang multiple silicon avalanche diodes to get the level of protection they need. The ultra-compact design of the AK15 Series has 12-times less volume than traditional discrete device solutions. This simplifies circuit design configurations and testing, eliminates component insertion and connection errors on printed circuit boards, and reduces overall manufacturing costs. It also means that protection circuits have lower capacitance and resistance, leading to higher operating efficiencies.

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Because the AK15 Series are silicon devices with glass passivated chip construction, they have no inherent wear-out mechanism when operated within their 15kA rating. This high-reliability design is UL Recognized, halogen-free, and RoHS compliant.

AK15 Series samples are available now for order and sample request through authorized Littelfuse distributors worldwide. AK15 devices are available 8-10 weeks ARO in 56 quantity bulk packs.

For more information about the AK15 Series, please visit the Littelfuse web site at [www.littelfuse.com](http://www.littelfuse.com) [1]

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[1] <http://www.littelfuse.com/>