

High-Current Gas Discharge Tubes For AC And DC Power Line Designs

[Bourns'](#) GDT225EX and GDT230E series of very high current two-electrode gas discharge tubes (GDTs) are designed to deliver extremely elevated energy surge protection for ac and dc power line designs. These high energy GDTs meet the enhanced requirements for international IEC lightning protection zones, UL 1449, and IEC 61643-11 standards, making them well suited for applications that are frequently subjected to excessive current surges.

The model GDT225EX series features a maximum surge rating of 120 kA on an 8-/20- μ s waveform and is housed in a compact 20-mm diameter flat configuration. The model GDT230E series provides a maximum surge rating of 160 kA in a 30-mm diameter flat configuration (see the figure).

Both models offer dc breakdown voltage options from 500 V to 800 V, providing reliable protection for compact ac power line applications, while ensuring compatibility with most common ac voltage system configurations. These series also give designers additional versatility in terms of providing options for diverse voltage configurations in low-voltage networks without having to compromise surge protection performance.

"Our customers look to Bourns for continued protection component innovation that is able to meet their evolving requirements. With the introduction of our GDT225EX and GDT230E series, Bourns continues this commitment. These additions not only enhance our portfolio with exceptional surge protection capabilities in a compact design, but also match strategic emerging market application specifications for ever-higher power protection," said David Chavarría, GDT/SPD product line manager at Bourns.

Bourns' model GDT225EX and GDT230E series two-electrode high energy GDTs are available now and are RoHS compliant and UL recognized. For more detailed information, see the High Current Series [page](#), or see the [GDT225EX](#) and [GDT230E](#) datasheets.



Figure. The Bourns model GDT225EX and GDT230E high-energy gas discharge tubes meet IEC and UL international lightning protection standards along with emerging market application specifications for ever-higher power protection.