

Ensures Maximum Reliability in The Harshest Environments



Low Dynamic
Resistance Provides
Up To 60 % Lower
Clamping Voltages
Than Alternative
Technologies

Ideally suited for power interfaces,
passenger charging interfaces, and
well as LED lighting modules, and low
speed I/Os

The AEC-Q101 qualified 200W AQHV and AQHV-C
Series are designed to provide an option for very fast
acting, high performance over-voltage protection devices.

Target Application:

- ESD protection for automotive electronics
- LED lighting modules
- CAN BUS (drive-by-wire)
- LIN BUS
- RS-232 and RS-485 interfaces
- General-purpose low-speed I/Os
- Portable instrumentation

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Features:

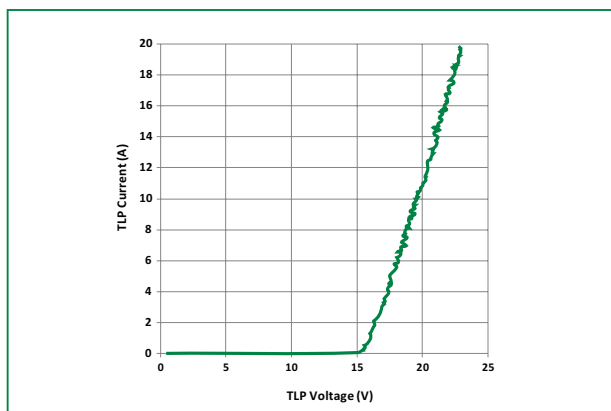
- Robust protection against ESD ($\pm 15\text{kV}$ – 30kV), lightning (2A–8A) and EFT (40A)
- Low dynamic resistance
- No inherent wear-out factor
- AEC-Q101 qualified

Benefits:

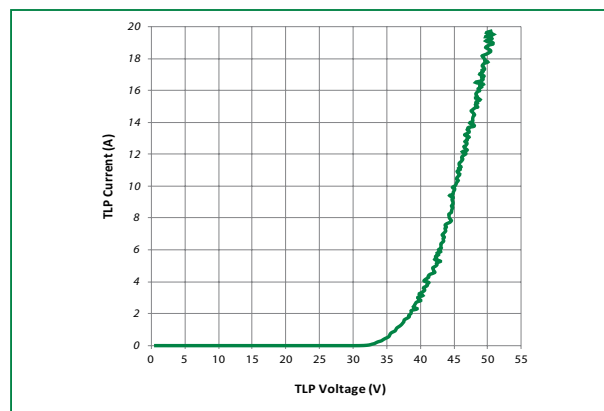
- Surpasses alternative technologies with similar levels of capacitance by 2-3X, allowing for more robust product implementations in the most challenging environments
- Provides up to 60 percent lower clamping voltages than alternative technologies, ideal for protecting modern electronics filled with small-geometry ICs
- Outlasts the equipment it protects and capable of handling multiple ESD or surge transients without performance degradation
- Ensures maximum reliability in the harshest environments

PPAP Capable

The PPAP-capable device provides enhanced performance verification across a wider temperature range than most commercial products can offer and the clearly defined product flow from wafer creation through packaging, testing, and tape and reel.



AQHV12 TLP



AQHV24-C TLP

Ordering Number	I _{pp} (A)	Reverse Breakdown Voltage (V)	Clamping Voltage (V)	Dynamic Resistance (Ω)	V _{ESD} Contact (kV)	Diode Capacitance (pF)	Package	AEC-Q101 Qualified
AQHV12-01ETG	8.0	13.3 (Min)	19.0 (Max)	0.37	±30	60 (Max)	SOD-882	Yes
AQHV15-01ETG	5.0	16.7 (Min)	22.0 (Max)	0.40	±30	46 (Max)	SOD-882	Yes
AQHV24-01ETG	3.0	26.7 (Min)	36.0 (Max)	0.56	±24	32 (Max)	SOD-882	Yes
AQHV36-01ETG	2.0	40.0 (Min)	52.0 (Max)	1.28	±15	25 (Max)	SOD-882	Yes
AQHV12-01ETG-C	8.0	13.3 (Min)	19.0 (Max)	0.48	±30	30 (Max)	SOD-882	Yes
AQHV15-01ETG-C	5.0	16.7 (Min)	22.0 (Max)	0.43	±30	24 (Max)	SOD-882	Yes
AQHV24-01ETG-C	3.0	26.7 (Min)	36.0 (Max)	0.65	±24	17 (Max)	SOD-882	Yes
AQHV36-01ETG-C	2.0	40.0 (Min)	52.0 (Max)	1.33	±15	13 (Max)	SOD-882	Yes