



The DNA of tech.®

DID YOU KNOW?

INDUSTRY-FIRST FLAT CLAMPING TYPE

XClampR® TVS

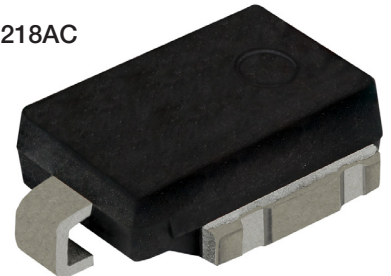
What Are the Key Features of XClampR® TVS?

- Designed to protect sensitive electronic equipment against voltage transients induced by inductive load switching and lightning
- With their low clamping voltage, XClampR TVS offer high peak pulse currents in the DO-218AC package
- Deliver low clamping voltage and high power density for robust transient protection in automotive and industrial power systems

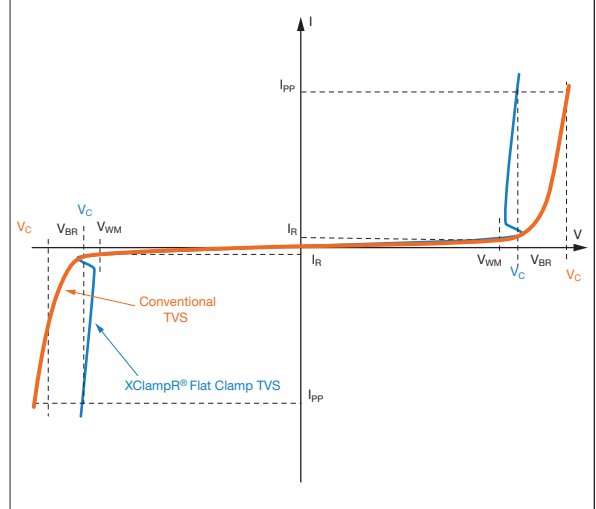
What Are the Key Benefits of XClampR TVS?

- High peak pulse power dissipation
- Peak pulse current up to 207.1 A at 10/1000 μ s — equivalent to 11 kW conventional TVS the DO-218AC — and peak pulse current up to 2140 A at 8/20 μ s
- Wide stand-off voltage range from 33 V to 85 V
- Low clamping ratio (V_C/V_{BR}) close to 1.0
- Breakdown voltages from 36.7 V to 104 V
- Maximum clamping voltages from 40.6 V to 104.0 V
- Low leakage current of 10 μ A maximum at stand-off voltage (V_{WM})
- Moisture sensitivity level (MSL) of 1 in accordance with J-STD-020, with a maximum peak reflow temperature of 245 °C
- Matte tin-plated leads are solderable per J-STD-002 and JESD 22-B102
- RoHS-compliant and halogen-free
- Wide operating temperature range of -55 °C to +175 °C
- Suitable for high reliability applications
 - Available in commercial-grade and AEC-Q101 qualified versions

DO-218AC



TYPICAL OPERATION CURVE OF XClampR FLAT CLAMPING AND CONVENTIONAL TVS



Why Choose XClampR TVS?

XClampR flat clamping type TVS offer an extremely low clamping voltage ratio (V_C/V_{BR}) close to 1.0 for suppressing transient voltages to lower clamping voltages than conventional TVS.

Part Number	V_{WM} (V)	V_{BR} (V)	P_{PPM} (W) (10 x 1000 μ s)	I_R MAX.	Package Code (JEDEC®)	TVS Polarity	T_J Max. (°C)	AEC-Q101 Qualified
XFD11K33CA thru XFD11K85CA	33 ~ 85	36.7 ~ 104	11 000	10 μ A	DO-218AC	Bidirectional	175	Yes