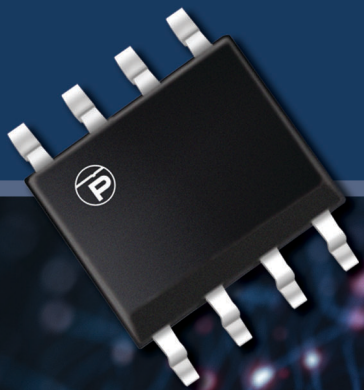


TVS Device Technology for Automotive Applications Using the PAM7 and PAM 11

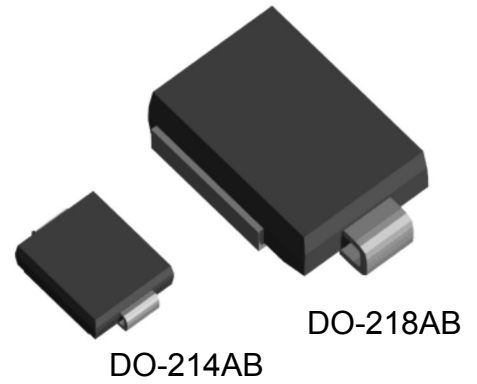
By ProTek Devices





PROTEK DEVICES®

PAM7KSMDJ24CAP And PAM11KLD8S24CAP A New TVS Device Technology for Automotive Applications



A new generation of Snap-back Transient Voltage Suppressor Devices that offers an Outstanding performance in terms of Power, Lower Clamping Voltage, targeted for Automotive Applications.

The PAM7KSMDJ24CAP offered in the DO-214AB (SMC) package, is rated at 7kW of peak Pulse Power 10/1,000us, with a maximum clamping voltage of 24V.

The PAM11KLD8S24CAP offered in the DO-218AB package is rated at 11kW maximum at 10/1000us Surge Pulse and 9kW at 10/10,000us Surge with a maximum clamping voltage

Features

- AEC Q101 Qualified
- T_{jmax} of 175°C
- Bidirectional Function
- I_R max of 1.0uA @ V_{RWM}
- ISO 16750 Pulse 5a 350ms (DO-218AB)

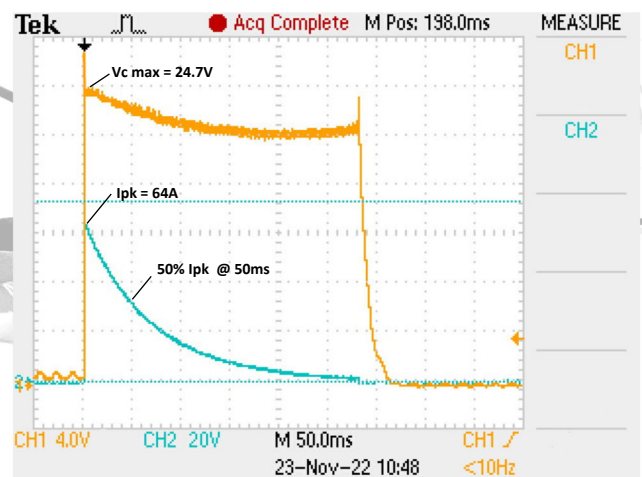
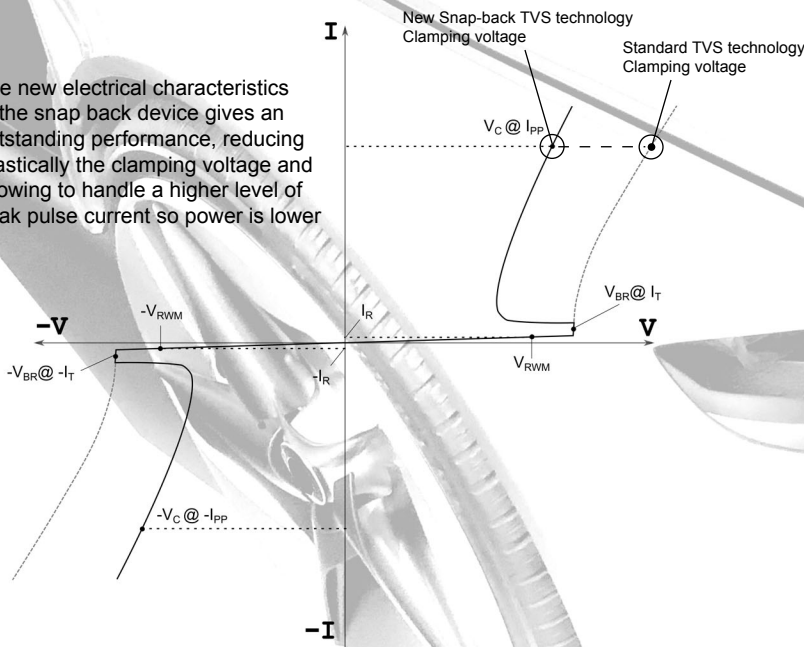
Applications

- Belt Starter Generator (BSG)
- Integrated Starter Generator (ISG) for HEV

Key Parameters

Package	Device	V_{RWM} , V	@ I_T , mA	V_C max, V	I_{pp} (10/1,000 μ s), A	I_{pp} (10/10,000 μ s), A
DO-214AB	PAM7KSMC24CAP	24	1.0	24	200	50
DO-218AB	PAM11KLD8S24CAP	24	1.0	26	300	200

The new electrical characteristics of the snap back device gives an outstanding performance, reducing drastically the clamping voltage and allowing to handle a higher level of peak pulse current so power is lower



PAM11KLD8S24CAP Current and Voltage Waveplot vs time under Surge Pulse 50ms, for reference.

COMPANY PROFILE

In business more than 30 years, ProTek Devices™ is a privately held semiconductor company. The company offers a product line of overvoltage protection components. These include Transient Voltage Suppressor arrays (TVS arrays), Steering Diode/Hybrid arrays, Thyristor Surge Suppressors, EMI Filters, High-Powered Components and Modules as well as Chipscale TVS arrays. These devices deliver circuit protection in electronic systems from numerous overvoltage events. They include lightning; electrostatic discharge (ESD); nuclear electromagnetic pulses (NEMP); inductive switching; and electromagnetic interference (EMI) / radio frequency interference (RFI). ProTek Devices is an ISO 9001 certified company.

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