SUPER CLAMP™

Low Clamp 24V Surface Mount TVS

SUPER CLAMP series of TVS (transient voltage suppressor) diodes with snapback characteristics features a low clamping ratio between the breakdown voltage and clamping voltage. This low clamping ratio provides a lower clamping voltage at a higher peak pulse current than conventional TVS, allowing designers to use capacitors with lower working voltages, in addition to switching devices including polarity protection diodes, load switch, and regulator ICs Additionally, SUPER CLAMP TVS have a very stable breakdown voltage and high peak pulse current at a wide operating range of - 55 °C through + 175 °C. Stable operating characteristic of SUPER CLAMP TVS makes the circuit meet automotive standard test ISO7637.

Official Website | X | LinkedIn

For more information: marketing@ts.com.tw

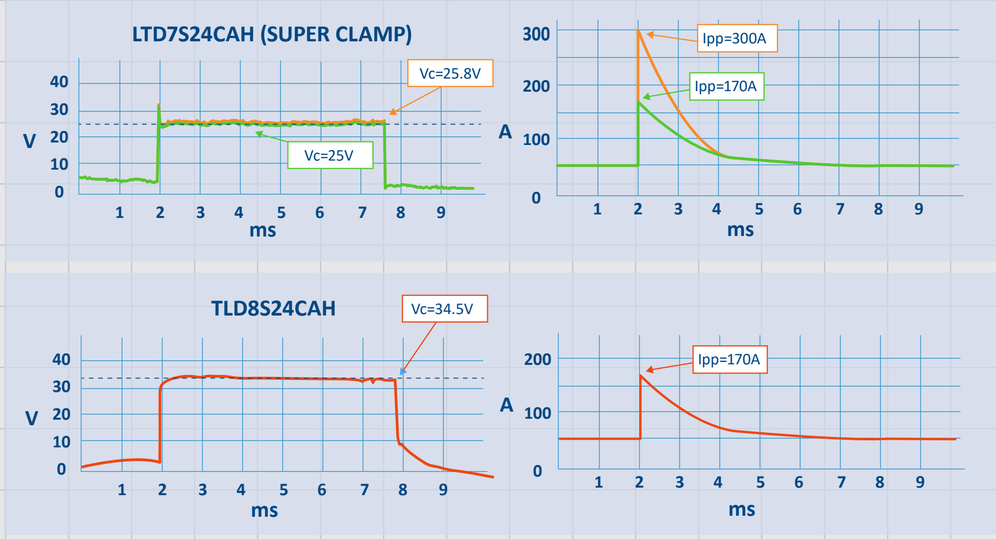
FEATURES

CLAMPING RATIO (VC/STAND-OFF VOLTAGE) BETWEEN 1.0~1.05

HIGHER PEAK PULSE CURRENT
75% vs standard TVS in SMB package

SPACE SAVINGS

AUTOMOTIVE QUALIFIED
AEC-Q101



SUPER CLAMP series of TVS delivers significantly lower clamping voltage compared to conventional TVS under the same pulse current conditions, as shown in the top figure.

Additionally, SUPER CLAMP series can handle much higher pulse currents within the same package size, such as DO-218AB: 300A v.s. 170A, making it an ideal choice for high-performance applications.

APPLICATIONS

AUTOMOTIVE | **MOTOR** | **REVERSE BATTERY PROTECTION** | **CAR LIGHTING** | **ROBOTIC ARM**

SPECIFICATION

Part number	Package	V_{WM} (V)	V_{BR} (V) Min	V_{BR} (V) Max	Max I_{PPM}@T_p= 10/1000(μs)	$VC_{Clamping}$
LTD7S24CAH	DO-218AB	24	26.7	29.5	300	24
LSMC24CAH	SMC		29.5	32.5	170	
LSMB24CAH	SMB		31	35	45	

DO-214AA (SMB) | DO-214AB (SMC) | DO-218AB

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