

AEC-Q101 Uni and Bi-Directional 400W Surface-Mount TVS

TSC introduces a new 400W peak pulse power ($P_{PK} = 400W$) Transient Voltage Suppressor (TVS) in a compact SOD-123W package. Compared with the conventional DO-214AC (SMA) package offering the same 400W P_{PK} rating, the SOD-123W package reduces PCB area by up to 52% and lowers package height. This makes it well suited for PCB space optimization and compact enclosure designs.

PACKAGE

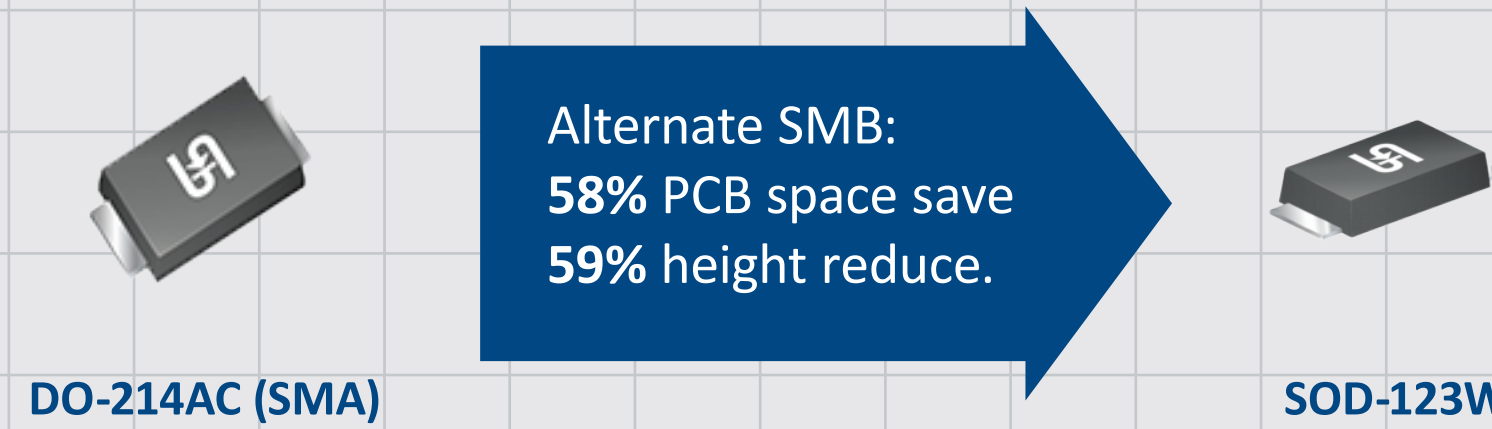


Figure 1: Space- and Height-Saving Advantages of the SOD-123W Package

SPECIFICATION

Configuration: Uni-directional

Part number	Breakdown voltage VBR@IT (V)		Test current IT (mA)	Working stand-off voltage VWM (V)	Maximum blocking leakage current IR@VWM (μA)	Maximum peak impulse current IPPM (A) tp =10/1000 μs	Maximum clamping voltage VC@IPPM (V)	Scan or click QR Code for full Spec
	Typ.	Max.						
SMF4L5.0AH SMF4L75AH	6.4 83.3	7.0 92.1	10 1	5 75	800 1	40.1 3.3	9.2 121.0	

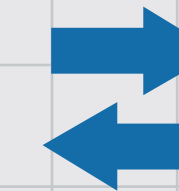
Configuration: Bi-directional

Part number	Breakdown voltage VBR@IT (V)		Test current IT (mA)	Working stand-off voltage VWM (V)	Maximum blocking leakage current IR@VWM (μA)	Maximum peak impulse current IPPM (A) tp =10/1000 μs	Maximum clamping voltage VC@IPPM (V)	Scan or click QR Code for full Spec
	Typ.	Max.						
SMF4L6.5CAH SMF4L64CAH	7.22 71.1	7.98 78.6	10 1	6.5 64	500 1	33.1 3.9	11.2 103.0	

FEATURES



AUTOMOTIVE QUALIFIED
AEC-Q101



UNI-DIRECTIONAL &
BI-DIRECTIONAL TYPES



MEETS SURGE SPECIFICATION
(Varied by test conditions)
ISO7637-2
(Pulse 1/2a/2b/3a/3b)

APPLICATIONS



AUTOMOTIVE



LIGHTING



SWITCHING
MODE POWER
SUPPLY (SMPS)



Official Website



X



LinkedIn

For more information: marketing@ts.com.tw

© 2026 TAIWAN SEMICONDUCTOR, CO., LTD. ALL RIGHTS RESERVED.



www.taiwansemi.com