

# Vishay eFuse Smart Load Switch Selector Guide

Vishay's portfolio of eFuse smart load switches delivers compact, high-performance solutions for circuit protection, power management, and system control in demanding applications. These devices integrate comprehensive protection and diagnostic features—such as programmable current limiting, overvoltage protection, and health reporting—while enabling precision control.

Designed to meet the needs of data centers, industrial systems, and automotive platforms, Vishay eFuses are available in scalable options from 0.3 A to 60 A, supporting common bus voltages including 3.3 V, 5 V, 12 V, 20 V, and 48 V. With parallelable designs for higher power



and compact footprints down to 2 x 2 mm, Vishay eFuses offer unmatched power density and reliability for today's fast-moving electronics landscape.

Use this selector guide to quickly identify the Vishay eFuse that meets your system's power, control, reporting, protection, and performance requirements.

#### **RESOURCES**

- For technical support, contact <a href="mailto:powerictechsupport@vishay.com">powerictechsupport@vishay.com</a>
- Material categorization: for definitions of compliance, please see <u>www.vishay.com/doc?91000</u>





### **Industrial applications**

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Part Number	Current handling, Input voltage range, On-resistance	Reverse Blocking (Y / N)	Package	Advantages	Applications
<u>SiP32433A</u>	3.5 A, 2.8 V to 22 V, 78 mΩ, eFuse with accurate current limit, OVP, latch-off on fault	Yes		Includes over- and undervoltage, overcurrent, and over-temperature protection.	Industrial, IoT, instrumentation, medical, smart home, patient monitors, retail point- of-sales terminals, appliances, power tools.
<u>SiP32433B</u>	3.5 A, 2.8 V to 22 V, 78 mΩ, eFuse with accurate current limit, OVP, and auto retry on fault	Yes		≥7 % precision OCP without overhead triggering, reverse current blocking	
SIP32434A	6 A, 2.8 V to 22 V, 33 m $\Omega$ , eFuse with programmable OVP and current limit, latch-off on fault	No	DFN10-33	Includes over- and undervoltage, overcurrent, and over-temperature protection.	
SIP32434B	6 A, 2.8 V to 22 V, 33 mΩ, , eFuse with programmable OVP and current limit, auto retry on fault	No	DI 1010-33	≥7 % precision OCP without overhead triggering	
SIP32440A	6 A, 2.8 V to 27 V, 33 mΩ, programmable current limit and slew rate, latch-off on fault	No		Extended input voltage up to 27 V max compared to	
SIP32440B	6 A, 2.8 V to 27 V, 33 mΩ, programmable current limit and slew rate, auto retry on fault	No		SiP32434A and SiP32434B	
<u>SiP32435A</u>	8 A, 2.7 V to 23 V, 9.2 mΩ eFuse With Transient Over Current Blanking, Adjustable OVP, and Active Current Clamping, latch-off on fault	No		Offers circuit breaker and current-clamping options, selectable overvoltage clamping devices, and programmable OCP blanking time, all in a compact 2 × 2 mm package with 8 A current handling.	
<u>SiP32435B</u>	8 A, 2.7 V to 23 V, 9.2 mΩ eFuse With Transient Over Current Blanking, Adjustable OVP, and Active Current Clamping, auto retry on fault	No			
SiP32436A	8 A, 2.7 V to 23 V, 9.2 mΩ eFuse With Transient Over Current Blanking, Selected OVP Clamping, and Active Current Clamping, latch-off on fault	No	TDFN22-10		
SiP32436B	8 A, 2.7 V to 23 V, 9.2 m $\Omega$ eFuse With Transient Over Current Blanking, Selected OVP Clamping, and Active Current Clamping, auto retry on fault	No			
SiP32437A	8 A, 2.7 V to 23 V, 9.2 mΩ eFuse With Transient Over Current Blanking, Adjustable OVP, and Circuit Breaker, latch-off on fault	No			
<u>SiP32437B</u>	8 A, 2.7 V to 23 V, 9.2 mΩ eFuse With Transient Over Current Blanking, Adjustable OVP, and Circuit Breaker, auto retry on fault	No			





Part Number	Current handling, Input voltage range, On-resistance	Reverse Blocking (Y / N)	Package	Advantages	Applications
SiPQ32433A	$3.5$ A, $2.8$ V to $22$ V, $78$ m $\Omega$ , AECQ100 qualified eFuse with accurate current limit, OVP, and active reverse current blocking, latch-off on fault	Yes	DFN33 10L wettable flank		Automotive infotainment, ADAS and auto pilot, cameras and sensors, USB hubs, holdup power switching, power muxing
SiPQ32433B	$3.5$ A, $2.8$ V to $22$ V, $78$ m $\Omega$ , AEC-Q100 qualified eFuse with accurate current limit, OVP, and active reverse current blocking, auto retry on fault	Yes	DFN33 10L wettable flank	Automotive AECQ-100 qualified	
SIPQ32434A	6 A, 2.8 V to 22 V, 33 mΩ, AEC-Q100 qualified eFuse with programmable OVP and current limit, latch-off on fault	No	DFN33 10L wettable flank	5% IMON/ILIM accuracy	
SIPQ32434B	6 A, 2.8 V to 22 V, 33 mΩ, AEC-Q100 qualified eFuse with programmable OVP and current limit, auto retry on fault	No	DFN33 10L wettable flank		





#### **Server Applications**

Part Number	Description	Configuration	Slew Rate Time (µs)	Package	Advantage	Applications
SiC32309	0.6 mΩ, hot-swap eFuse, IMON, GOK, D_OC report latch on fault	Parallelable	Adjustable	PowerPAK MLP32S-55	Lowest on-resistance in 5 × 5 mm for minimal power loss, with SOA protection for higher start-up current, plus 2.3 ms overcurrent blanking for robust performance.	Servers, Hot swap, PC cards, Disk drives, Networking
<u>SiC32311E</u>	18 V, 60 A, 0.6 mΩ R <sub>DS(on)</sub> Hot-Swap eFuse Switch	Parallelable	Adjustable	PowerPAK MLP32S-55		
SiC32312E (Forthcoming)	Check for datasheet on web week of 7/8	Parallelable	Adjustable	PowerPAK MLP32S-55		
SiC32305	1.2 m $\Omega$ , hot-swap eFuse, IMON, PGD report latch on fault	Stand alone	Adjustable	PowerPAK MLP28S-44	Delivers superior power density and efficiency with 30 A capability—50% higher than the	
SiC32306	1.2 mΩ, hot-swap eFuse, IMON, PGD report auto-retry, 1 s after fault is removed	Stand alone	Adjustable	PowerPAK MLP28S-44		
SiP32435A (Forthcoming)	8 A, 2.7 V to 23 V, 9.2 mΩ eFuse With Transient Over Current Blanking, Adjustable OVP, and Active Current Clamping, latch-off on fault	No	Adjustable		Provides 8 A DC current capability in a compact 2 × 2 mm package, supporting 2.7 V to 23 V operation with precision current reporting and adjustable transient overcurrent blanking.	(RAID /eSSD / HBA), optical modules
SiP32435B (Forthcoming)	8 A, 2.7 V to 23 V, 9.2 mΩ eFuse With Transient Over Current Blanking, Adjustable OVP, and Active Current Clamping, auto retry on fault	No				
<u>SiP32436A</u>	8 A, 2.7 V to 23 V, 9.2 mΩ eFuse With Transient Over Current Blanking, Selected OVP Clamping, and Active Current Clamping, latch-off on fault	No		TDFN22-10		
SiP32436B	8 A, 2.7 V to 23 V, 9.2 mΩ eFuse With Transient Over Current Blanking, Selected OVP Clamping, and Active Current Clamping, auto retry on fault	No				
<u>SiP32437A</u>	8 A, 2.7 V to 23 V, 9.2 mΩ eFuse With Transient Over Current Blanking, Adjustable OVP, and Circuit Breaker, latch-off on fault	No				
<u>SiP32437B</u>	8 A, 2.7 V to 23 V, 9.2 mΩ eFuse With Transient Over Current Blanking, Adjustable OVP, and Circuit Breaker, auto retry on fault	No				





