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# Product Information Notification

Product Group: SIL/Saturday December 20, 2025/PIN-SIL-000503-2025-REV-0



## SiC967 Datasheet Update

For further information, please contact your regional Vishay office.

### CONTACT INFORMATION

#### Americas

Vishay Americas  
2585 Junction Avenue  
-  
San Jose United States 95134- 1923  
Phone: +1-408-988-8000  
Fax:  
-

#### Europe

Vishay Europe Sales GmbH  
Dr Felix Zandman Platz 1  
-  
Selb Germany 95101  
Phone: +49-9287-710  
Fax:  
business-europe@vishay.com

#### Asia

Vishay Intertechnology Asia Pte.Ltd  
37A Tampines Street 92  
#07-01  
Singapore Singapore Singapore 528886  
Phone: +65-6788-6668  
Fax:  
business-asia@vishay.com

**Description of Change:** 1. All the references to ""Ultrasonic"" are removed  
2. Fig 5 is updated (with ultrasonic signal removed)  
3. Fig 10 is updated due to some error"

**Reason for Change:** SiC967 does not support Ultrasonic operating mode

**Expected Influence on Quality/Reliability/Performance:** There will be no effect on performance, quality or reliability.

**Part Numbers/Series/Families Affected:** SIC967ED-T1-GE3, SIC967ED-Y1-GE3,

**Vishay Brand(S):** Vishay Siliconix

**Time Schedule:**

Start Shipment Date: Tuesday January 20, 2026

**Sample Availability:** Samples are available now

**Product Identification:** Lot Number

**Qualification Data:** Available upon Request

**Issued By:** Lisette Saba, malinalisette.saba@vishay.com

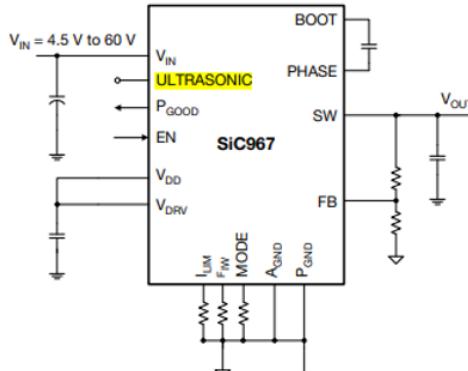
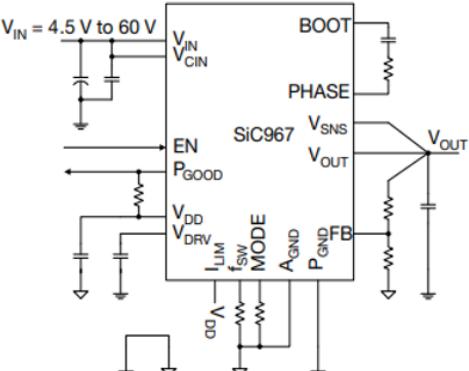


PIN-SIL-000503-2025-REV-0

## **Data Sheet comparison**

**December 2025**

## Data Sheet of SIC967

Previous Datasheet (Rev. C)	Updated Datasheet (Rev. D)
<p><b>TYPICAL APPLICATION CIRCUIT</b></p>  <p>Fig. 1 - Typical Application Circuit</p>	<p><b>TYPICAL APPLICATION CIRCUIT</b></p>  <p>Fig. 1 - Typical Application Circuit</p>

FEATURES		FEATURES	
<ul style="list-style-type: none"> <li>• Versatile <ul style="list-style-type: none"> <li>- Single supply operation from 4.5 V to 60 V input voltage</li> <li>- Adjustable output voltage down to 0.8 V</li> <li>- Output voltage tracking and sequencing with pre-bias start up</li> <li>- <math>\pm 1\%</math> output voltage accuracy at <math>-40^{\circ}\text{C}</math> to <math>+125^{\circ}\text{C}</math></li> </ul> </li> <li>• Internal compensation</li> <li>• Highly efficient <ul style="list-style-type: none"> <li>- 95 % peak efficiency</li> <li>- 4 <math>\mu\text{A}</math> supply current at shutdown</li> <li>- 100 <math>\mu\text{A}</math> operating current not switching</li> </ul> </li> <li>• Highly configurable <ul style="list-style-type: none"> <li>- Adjustable switching frequency from 100 kHz to 2 MHz</li> <li>- Fixed soft start and selectable preset 100 %, 75 %, and 50 % current limit</li> <li>- 3 modes of operation, forced continuous conduction, power save or <b>ultrasonic</b></li> </ul> </li> <li>• Robust and reliable</li> </ul>		<ul style="list-style-type: none"> <li>• Versatile <ul style="list-style-type: none"> <li>- Single supply operation from 4.5 V to 60 V input voltage</li> <li>- Adjustable output voltage down to 0.8 V</li> <li>- Output voltage tracking and sequencing with pre-bias start up</li> <li>- <math>\pm 1\%</math> output voltage accuracy at <math>-40^{\circ}\text{C}</math> to <math>+125^{\circ}\text{C}</math></li> </ul> </li> <li>• Internal compensation</li> <li>• Highly efficient <ul style="list-style-type: none"> <li>- 95 % peak efficiency</li> <li>- 4 <math>\mu\text{A}</math> supply current at shutdown</li> <li>- 100 <math>\mu\text{A}</math> operating current not switching</li> </ul> </li> <li>• Highly configurable <ul style="list-style-type: none"> <li>- Adjustable switching frequency from 100 kHz to 2 MHz</li> <li>- Fixed soft start and selectable preset 100 %, 75 %, and 50 % current limit</li> <li>- 2 operating modes: FPWM or power save</li> </ul> </li> <li>• Robust and reliable</li> </ul>	
<b>ELECTRICAL SPECIFICATIONS</b> ( $V_{IN} = V_{CIN} = 48\text{ V}$ , $T_j = -40^{\circ}\text{C}$ to $+125^{\circ}\text{C}$ , unless otherwise stated)		<b>ELECTRICAL SPECIFICATIONS</b> ( $V_{IN} = V_{CIN} = 48\text{ V}$ , $T_j = -40^{\circ}\text{C}$ to $+125^{\circ}\text{C}$ , unless otherwise stated)	
PARAMETER	SYMBOL	TEST CONDITIONS	MIN. TYP. MAX. UNIT
Power Supplies			
$V_{DD}$ supply	$V_{DD}$	$V_{IN} = V_{CIN} = 6\text{ V}$ to $60\text{ V}$ , $V_{EN} = 5\text{ V}$ , not switching	4.5 5 5.35 V
		$V_{IN} = V_{CIN} = 5\text{ V}$ , $V_{EN} = 5\text{ V}$ , not switching	4.5 5 - mV
$V_{DD}$ dropout	$V_{DD\_DROPOUT}$	$V_{IN} = V_{CIN} = 5\text{ V}$ , $I_{VDD} = 1\text{ mA}$	- 100 - mV
$V_{DD}$ UVLO threshold, rising	$V_{DD\_UVLO\_RISING}$	- 3.5 3.8 4.1 V	
$V_{DD}$ UVLO hysteresis	$V_{DD\_UVLO\_HYST}$	- 300 - mV	
Input current	$I_{VIN}$	Non-switching, $V_{FB} > 0.8\text{ V}$	- 250 $\mu\text{A}$
Shutdown current	$I_{V_{CIN\_SHDN}}$	$V_{EN} = 0\text{ V}$	- 4 8 $\mu\text{A}$
Controller and Timing			
Feedback voltage	$V_{FB}$	$T_j = 25^{\circ}\text{C}$	796 800 804 mV
		$T_j = -40^{\circ}\text{C}$ to $+125^{\circ}\text{C}$ (1)	792 800 808 mV
$V_{FB}$ input bias current	$I_{FB}$	- 16 - nA	
Minimum on-time	$t_{ON\_MIN.}$	- 45 100 ns	
$t_{ON}$ accuracy	$t_{ON\_ACCURACY}$	-10 - 10 %	
On-time range	$t_{ON\_RANGE}$	100 - 8000 ns	
Frequency range	$f_{sw}$	Ultrasonic mode enabled 20 - - kHz	
Ultrasonic mode disabled		- - -	
Minimum off-time	$t_{OFF\_MIN.}$	- 300 - ns	
Soft start current (1)	$I_{SS}$	- 3.5 - $\mu\text{A}$	
Zero crossing detection point (1)	ZCD	$LX-P_{GND}$	-3 - 3 mV

EN / MODE / Ultrasonic Threshold					V
EN logic high level	$V_{EN\_H}$	1.2	1.4	1.5	
EN logic low level	$V_{EN\_L}$	1.00	1.12	1.25	mV
EN logic hysteresis	$V_{EN\_HYS}$	200	280	360	mV
EN pull down resistance	$R_{EN}$	-	5	-	MΩ
Ultrasonic mode high Level	$U_{HIGH}$	2	-	-	V
Ultrasonic mode low level	$U_{LOW}$	-	-	0.8	V
Mode pull up current	$I_{MODE}$	-	5	-	μA
Mode 1	$R_{MODE}$	Power save mode enabled, $V_{DD}$ , $V_{DRV}$ pre-reg on	-	2	-
Mode 2		Power save mode disabled, $V_{DD}$ , $V_{DRV}$ pre-reg on	-	301	-
Mode 3		Power save mode disabled, $V_{DD}$ pre-reg off, $V_{DD}$ pre-reg on, provide external $V_{DRV}$	-	499	-
Mode 4		Power save mode enabled, $V_{DRV}$ pre-reg off, $V_{DD}$ pre-reg on, provide external $V_{DRV}$	-	1000	-
Soft Start					ms
Soft start timing (1)		-	6	-	ms

EN / MODE / Threshold					V
EN logic high level	$V_{EN\_H}$	1.2	1.4	1.5	
EN logic low level	$V_{EN\_L}$	1.00	1.12	1.25	mV
EN logic hysteresis	$V_{EN\_HYS}$	200	280	360	mV
EN pull down resistance	$R_{EN}$	-	5	-	MΩ
Mode pull up current	$I_{MODE}$	-	5	-	μA
Mode 1	$R_{MODE}$	Power save mode enabled, $V_{DD}$ , $V_{DRV}$ pre-reg on	-	2	-
Mode 2		Power save mode disabled, $V_{DD}$ , $V_{DRV}$ pre-reg on	-	301	-
Mode 3		Power save mode disabled, $V_{DD}$ pre-reg off, $V_{DD}$ pre-reg on, provide external $V_{DRV}$	-	499	-
Mode 4		Power save mode enabled, $V_{DRV}$ pre-reg off, $V_{DD}$ pre-reg on, provide external $V_{DRV}$	-	1000	-
Soft Start					ms
Soft start timing (1)		-	6	-	ms

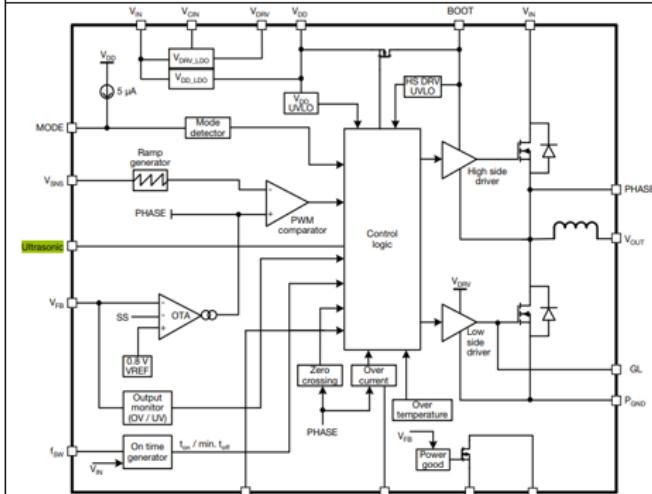
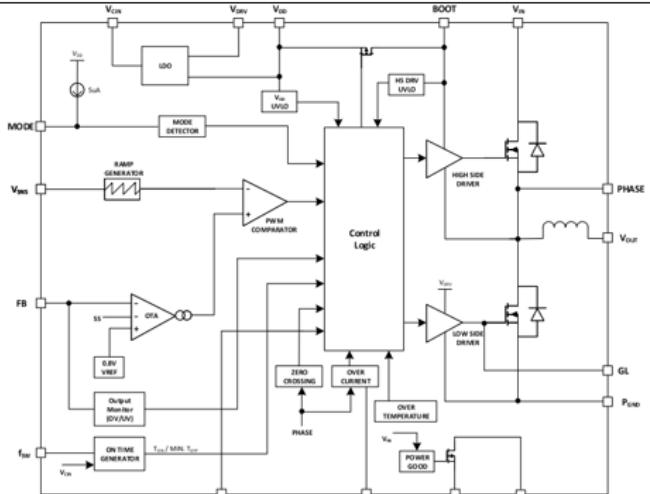



Fig. 5 - Functional Block Diagram

Fig. 5 - Functional Block Diagram

