



Product Change Notification



Product Group: SIL/Wed Nov 23, 2022/PCN-SIL-000407-2022-REV-0

DG9424/5/6E Datasheet Update

DESCRIPTION OF CHANGE: Change of Turn-on time Full temp Max limit specification for 3V Single supply from 193 ns to 230 ns

REASON FOR CHANGE: Update limits more accurately

EXPECTED INFLUENCE ON QUALITY/RELIABILITY/PERFORMANCE: There will be no effect on performance, quality or reliability.

PART NUMBERS/SERIES/FAMILIES AFFECTED: DG9424EDN-T1-GE4, DG9424EDQ-T1-GE3, DG9425EDQ-T1-GE3, DG9426EDQ-T1-GE3,

VISHAY BRAND(s): Vishay Siliconix

TIME SCHEDULE:

Start Shipment Date: Mon Jan 23, 2023

SAMPLE AVAILABILITY: Now: 11/23/22

PRODUCT IDENTIFICATION: Date Code from 9/1/22

QUALIFICATION DATA: Comparison Data Attached

This PCN is considered approved, without further notification, unless we receive specific customer concerns before Mon Jan 23, 2023 or as specified by contract.

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For further information, please contact your regional Vishay office.

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Vishay Intertechnology, Inc.

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DG9424E/9425E/9426E Datasheet revision Comparison

DG9424E, DG9425E, DG9426E Datasheet – Doc#75770

Revision C – June 2020

SPECIFICATIONS ^a Single Supply 3 V							
PARAMETER	SYMBOL	TEST CONDITIONS UNLESS OTHERWISE SPECIFIED V ₊ = 3 V, V ₋ = 0 V V _L = 3 V, V _{IN} = 2.4 V, 0.4 V ^f	TEMP. ^b	LIMITS -40 °C to +85 °C			UNIT
				MIN. ^d	TYP. ^c	MAX. ^d	
Analog Switch							
Analog signal range ^a	V _{ANALOG}		Full	0	-	3	V
On-resistance	R _{ON}	V ₊ = 2.7 V, V ₋ = 0 V. I _{NO} , I _{NC} = 5 mA, V _{COM} = 0.5, 2.2 V	Room	-	6	-	Ω
			Full	-	-	-	
Switch off leakage current ^a	I _{NO(off)}	V ₊ = 3.3 V, V ₋ = 0 V. V _{COM} = 0.3, 3 V, V _{NO} , V _{NC} = 3, 0.3 V	Room	-1	-	1	nA
	I _{NC(off)}		Full	-10	-	10	
	I _{COM(off)}		Room	-1	-	1	
			Full	-10	-	10	
Channel on leakage current ^a	I _{COM(on)}	V ₊ = 3.3 V, V ₋ = 0 V, V _{NO} , V _{NC} = V _{COM} = 0.3, 3 V	Room	-1	-	1	nA
			Full	-10	-	10	
Digital Control ^e							
Input current	I _{INL} or I _{INH}		Full	-1	0.005	1	μA
Dynamic Characteristics							
Turn-on time	t _{ON}	R _L = 300 Ω, C _L = 35 pF. V _{NO} , V _{NC} = 1.5 V, see Fig. 2	Room	-	140	-	ns
			Full	-	-	193	
Turn-off time	t _{OFF}	V _{NO} , V _{NC} = 1.5 V, see Fig. 2	Room	-	65	-	ns
			Full	-	-	89	

Revision D – October 2022

SPECIFICATIONS ^a Single Supply 3 V							
PARAMETER	SYMBOL	TEST CONDITIONS UNLESS OTHERWISE SPECIFIED V ₊ = 3 V, V ₋ = 0 V V _L = 3 V, V _{IN} = 2.4 V, 0.4 V ^f	TEMP. ^b	LIMITS -40 °C to +85 °C			UNIT
				MIN. ^d	TYP. ^c	MAX. ^d	
Analog Switch							
Analog signal range ^a	V _{ANALOG}		Full	0	-	3	V
On-resistance	R _{ON}	V ₊ = 2.7 V, V ₋ = 0 V. I _{NO} , I _{NC} = 5 mA, V _{COM} = 0.5, 2.2 V	Room	-	6	-	Ω
			Full	-	-	-	
Switch off leakage current ^a	I _{NO(off)}	V ₊ = 3.3 V, V ₋ = 0 V. V _{COM} = 0.3, 3 V, V _{NO} , V _{NC} = 3, 0.3 V	Room	-1	-	1	nA
	I _{NC(off)}		Full	-10	-	10	
			I _{COM(off)}	Room	-1	-	
	Full			-10	-	10	
Channel on leakage current ^a	I _{COM(on)}	V ₊ = 3.3 V, V ₋ = 0 V, V _{NO} , V _{NC} = V _{COM} = 0.3, 3 V	Room	-1	-	1	nA
			Full	-10	-	10	
Digital Control ^e							
Input current	I _{INL} or I _{INH}		Full	-1	0.005	1	μA
Dynamic Characteristics							
Turn-on time	t _{ON}	R _L = 300 Ω, C _L = 35 pF. V _{NO} , V _{NC} = 1.5 V, see Fig. 2	Room	-	170	-	ns
			Full	-	-	230	
Turn-off time	t _{OFF}	V _{NO} , V _{NC} = 1.5 V, see Fig. 2	Room	-	65	-	ns
			Full	-	-	89	

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Procedure #