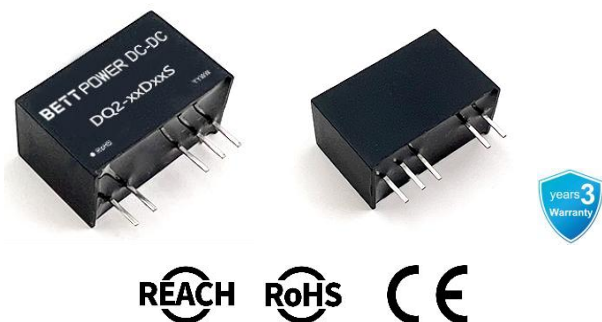


DQ2-xxDxxS Series

DC-DC Converter | 2W | SIP7 | IGBT/SiC Driver Power Supply | 5000VAC



Features

- SIP7 Package
- Operating Temperature Range: -40°C ~ +105°C
- Isolation Voltage: 5000VAC
- Full Load Efficiency: 88% (typ.)
- Continuous Short Circuit Protection
- CMTI >200kV/μs
- Designed to meet IEC/EN/UL62368

Product Description



The DQ2-xxDxxS series are isolated DC-DC converters for IGBT drivers/ SiC drivers. It features a high efficiency up to 88%, 5.0KVAC I/P-O/P high isolation voltage, continuous short circuit protection, etc. The models are suitable for ultra-low leakage current, industrial control, telecommunication field. General applications include general inverters, server telecom, datacom system, uninterruptible power supply (UPS), and so on.

Selection Guide

Certification	Part No.	Input Voltage (VDC)	Output		Full Load Efficiency (%) Typ.	Capacitive Load (μF) Max.
		Nominal Value (Range)	Output Voltage (VDC) +Vo/-Vo	Max. Current (mA) +Io/-Io		
EN pending	DQ2-05D1505S	5 (4.5-5.5)	+15/-5	+100/-100	81	1000
	DQ2-05D2005S	5 (4.5-5.5)	+20/-5	+100/-100	81	470
	DQ2-12D1502S	12 (10.8-13.2)	+15/-2.5	+100/-100	82	2200
	DQ2-12D1503S	12 (10.8-13.2)	+15/-3.5	+111/-111	82	2200
	DQ2-12D1504S	12 (10.8-13.2)	+15/-4	+120/-120	80	2200
	DQ2-12D1508S	12 (10.8-13.2)	+15/-8	+120/-120	79	1000
	DQ2-12D1509S	12 (10.8-13.2)	+15/-9	+100/-100	84	1000
	DQ2-12D1802S	12 (10.8-13.2)	+18/-2.5	+100/-100	81	680
	DQ2-12D1803S	12 (10.8-13.2)	+18/-3.5	+100/-100	81	470
	DQ2-12D1805S	12 (10.8-13.2)	+18/-5	+100/-100	82	470
	DQ2-12D2004S	12 (10.8-13.2)	+20/-4	+100/-100	81	470
	DQ2-12D2005S	12 (10.8-13.2)	+20/-5	+100/-100	79	470
	DQ2-15D1502S	12 (10.8-13.2)	+15/-2.5	+100/-100	82	2200

DQ2-xxDxxS Series IGBT/SiC Driver power supply

DC-DC Converter | 2W | SIP7 | IGBT/SiC Driver power supply | 5000VAC



Selection Guide

Certification	Part No.	Input Voltage (VDC)	Output		Full Load Efficiency (%) Typ.	Capacitive Load (μF) Max.
		Nominal Value (Range)	Output Voltage (VDC) +Vo/-Vo	Max. Current (mA) +Io/-Io		
EN pending	DQ2-15D1504S	15 (13.5-16.5)	+15/-4	+120/-120	83	2200
	DQ2-15D1505S	15 (13.5-16.5)	+15/-5	+100/-100	83	1000
	DQ2-15D1508S	15 (13.5-16.5)	+15/-8	+120/-120	83	1000
	DQ2-15D1509S	15 (13.5-16.5)	+15/-8.7	+100/-100	84	1000
	DQ2-15D1803S	15 (13.5-16.5)	+18/-3	+100/-100	84	1000
	DQ2-15D2004S	15 (13.5-16.5)	+20/-4	+100/-100	83	470
	DQ2-15D2005S	15 (13.5-16.5)	+20/-5	+90/-90	84	470
	DQ2-24D1002S	24 (21.6-26.4)	+10/-2	+120/-120	82	2200
	DQ2-24D1504S	24 (21.6-26.4)	+15/-4	+120/-120	86	2200
	DQ2-24D1508S	24 (21.6-26.4)	+15/-8	+120/-120	87	1000
	DQ2-24D1509S	24 (21.6-26.4)	+15/-8.7	+120/-120	87	1000
	DQ2-24D1802S	24 (21.6-26.4)	+18/-2.5	+80/-80	86	1000
	DQ2-24D1803S	24 (21.6-26.4)	+18/-3	+100/-100	86	1000
	DQ2-24D2004S	24 (21.6-26.4)	+20/-4	+100/-100	88	470
	DQ2-24D2005S	24 (21.6-26.4)	+20/-5	+90/-90	88	470

Notes:

1. Efficiency is measured at nominal input voltage and rated output load.
2. The positive and negative outputs are connected to the same capacitor.

Input Specifications

Item	Operating Conditions		Min.	Typ.	Max.	Unit
Input Current (Full Load/No-load)	5VDC Input	DQ2-05D1503S	--	465/30	--	mA
		DQ2-05D1503S	--	554/35	--	mA
	12VDC Input	DQ2-12D1502S	--	172/6	--	mA
		DQ2-12D1503S	--	199/6	--	mA
		DQ2-12D1504S	--	222/6	--	mA
		DQ2-12D1508S	--	261/6	--	mA
		DQ2-12D1509S	--	226/6	--	mA
		DQ2-12D1802S	--	210/6	--	mA
		DQ2-12D1803S	--	207/8	--	mA
		DQ2-12D1805S	--	225/6	--	mA
		DQ2-12D2004S	--	234/6	--	mA
		DQ2-12D2005S	--	242/6	--	mA
	15VDC Input	DQ2-15D1502S	--	134/6	--	mA
		DQ2-15D1504S	--	173/6	--	mA
		DQ2-15D1505S	--	153/6	--	mA
		DQ2-15D1508S	--	205/6	--	mA
		DQ2-15D1509S	--	179/6	--	mA
		DQ2-15D1803S	--	160/6	--	mA
		DQ2-15D2004S	--	187/6	--	mA
		DQ2-15D2005S	--	175/8	--	mA
	24VDC Input	DQ2-24D1002S	--	76/3	--	mA
		DQ2-24D1504S	--	113/3	--	mA
		DQ2-24D1508S	--	129/3	--	mA
		DQ2-24D1509S	--	135/3	--	mA
		DQ2-24D1802S	--	76/3	--	mA
		DQ2-24D1803S	--	104/3	--	mA
		DQ2-24D2004S	--	118/3	--	mA
		DQ2-24D2005S	--	110/3	--	mA
Surge Voltage (1sec.max.)	5VDC Input	DQ2-05D2005LS	-0.7	--	9	VDC
	12VDC Input	DQ2-12D1503LS	-0.7	--	18	VDC
	15VDC Input	DQ2-15D1504LS	-0.7	--	21	VDC
	24VDC Input	DQ2-24D2004LS	-0.7	--	30	VDC
Input Filter Type			Capacitor Filter			
Hot Plug			Unavailable			

Output Specifications

Item	Operating Conditions			Min.	Typ.	Max.	Unit
Output Voltage	DQ2-05D1503S	+Vo	Vin=5VDC, Pin6 & Pin7 +Io=+100mA	14.32	15.08	15.83	VDC
		-Vo	Vin=5VDC, Pin5 & Pin6 +Io=-100mA	4.20	4.60	4.85	VDC
	DQ2-05D1503S	+Vo	Vin=5VDC, Pin6 & Pin7 +Io=+100mA	19.50	20.50	21.50	VDC
		-Vo	Vin=5VDC, Pin5 & Pin6 +Io=-100mA	4.20	4.60	4.85	VDC
	DQ2-12D1502S	+Vo	Vin=12VDC, Pin6 & Pin7 +Io=+100mA	14.47	15.23	15.98	VDC
		-Vo	Vin=12VDC, Pin5 & Pin6 +Io=-100mA	2.26	2.46	2.59	VDC
	DQ2-12D1503S	+Vo	Vin=12VDC, Pin6 & Pin7 +Io=+111mA	14.32	15.08	15.83	VDC
		-Vo	Vin=12VDC, Pin5 & Pin6 +Io=-111mA	2.94	3.22	3.40	VDC
	DQ2-12D1504S	+Vo	Vin=12VDC, Pin6 & Pin7 +Io=+120mA	14.25	15.00	15.75	VDC
		-Vo	Vin=12VDC, Pin5 & Pin6 +Io=-120mA	3.68	4.00	4.20	VDC
	DQ2-12D1508S	+Vo	Vin=12VDC, Pin6 & Pin7 +Io=+120mA	14.17	14.93	15.68	VDC
		-Vo	Vin=12VDC, Pin5 & Pin6 +Io=-120mA	7.44	7.84	8.24	VDC
	DQ2-12D1509S	+Vo	Vin=12VDC, Pin6 & Pin7 +Io=+100mA	14.40	15.15	15.90	VDC
		-Vo	Vin=12VDC, Pin5 & Pin6 +Io=-100mA	8.23	8.69	9.14	VDC
	DQ2-12D1802S	+Vo	Vin=12VDC, Pin6 & Pin7 +Io=+100mA	17.10	18.00	18.90	VDC
		-Vo	Vin=12VDC, Pin5 & Pin6 +Io=-100mA	2.40	2.60	2.73	VDC
	DQ2-12D1803S	+Vo	Vin=12VDC, Pin6 & Pin7 +Io=+100mA	17.10	18.00	18.90	VDC
		-Vo	Vin=12VDC, Pin5 & Pin6 +Io=-100mA	2.97	3.26	3.43	VDC
	DQ2-12D1805S	+Vo	Vin=12VDC, Pin6 & Pin7 +Io=+100mA	17.10	18.00	18.90	VDC
		-Vo	Vin=12VDC, Pin5 & Pin6 +Io=-100mA	5.10	5.50	5.75	VDC
	DQ2-12D2004S	+Vo	Vin=12VDC, Pin6 & Pin7 +Io=+100mA	19.00	20.00	21.00	VDC
		-Vo	Vin=12VDC, Pin5 & Pin6 +Io=-100mA	3.72	4.04	4.24	VDC
	DQ2-12D2005S	+Vo	Vin=12VDC, Pin6 & Pin7 +Io=+100mA	19.00	20.00	21.00	VDC
		-Vo	Vin=12VDC, Pin5 & Pin6 +Io=-100mA	4.42	4.83	5.08	VDC
	DQ2-15D1502S	+Vo	Vin=15VDC, Pin5 & Pin6 +Io=-100mA	14.02	14.78	15.53	VDC
		-Vo	Vin=15VDC, Pin6 & Pin7 +Io=+100mA	2.07	2.28	2.40	VDC
	DQ2-15D1504S	+Vo	Vin=15VDC, Pin5 & Pin6 +Io=-120mA	13.80	14.55	15.30	VDC
		-Vo	Vin=15VDC, Pin6 & Pin7 +Io=+120mA	3.90	4.22	4.42	VDC
	DQ2-15D1505S	+Vo	Vin=15VDC, Pin5 & Pin6 +Io=-100mA	14.02	14.78	15.53	VDC
		-Vo	Vin=15VDC, Pin6 & Pin7 +Io=+100mA	4.85	5.25	5.50	VDC
	DQ2-15D1508S	+Vo	Vin=15VDC, Pin5 & Pin6 +Io=-120mA	13.80	14.55	15.30	VDC
		-Vo	Vin=15VDC, Pin6 & Pin7 +Io=+120mA	7.72	8.12	8.52	VDC
	DQ2-15D1509S	+Vo	Vin=15VDC, Pin5 & Pin6 +Io=-100mA	14.10	14.85	15.60	VDC
		-Vo	Vin=15VDC, Pin6 & Pin7 +Io=+100mA	8.74	9.18	9.62	VDC
	DQ2-15D1803S	+Vo	Vin=15VDC, Pin5 & Pin6 +Io=-100mA	16.74	17.64	18.54	VDC
		-Vo	Vin=15VDC, Pin6 & Pin7 +Io=+100mA	3.03	3.27	3.42	VDC
	DQ2-15D2004S	+Vo	Vin=15VDC, Pin5 & Pin6 +Io=-100mA	19.30	20.30	21.30	VDC
		-Vo	Vin=15VDC, Pin6 & Pin7 +Io=+100mA	3.94	4.26	4.46	VDC

DQ2-xxDxxS Series IGBT/SiC Driver power supply

DC-DC Converter | 2W | SIP7 | IGBT/SiC Driver power supply | 5000VAC



Output Voltage	DQ2-15D2005S	+Vo	Vin=15VDC, Pin5 & Pin6 +Io=-90mA	19.30	20.30	21.30	VDC
		-Vo	Vin=15VDC, Pin6 & Pin7 +Io=+90mA	4.85	5.25	5.50	VDC
	DQ2-24D1002S	+Vo	Vin=24VDC, Pin6 & Pin7 +Io=+120mA	9.95	10.45	10.95	VDC
		-Vo	Vin=24VDC, Pin5 & Pin6 +Io=-120mA	2.22	2.38	2.48	VDC
	DQ2-24D1504S	+Vo	Vin=24VDC, Pin6 & Pin7 +Io=+120mA	14.70	15.45	16.20	VDC
		-Vo	Vin=24VDC, Pin5 & Pin6 +Io=-120mA	4.12	4.44	4.64	VDC
	DQ2-24D1508S	+Vo	Vin=24VDC, Pin6 & Pin7 +Io=+120mA	14.70	15.45	16.20	VDC
		-Vo	Vin=24VDC, Pin5 & Pin6 +Io=-120mA	7.12	7.52	7.92	VDC
	DQ2-24D1509S	+Vo	Vin=24VDC, Pin6 & Pin7 +Io=+120mA	14.70	15.45	16.20	VDC
		-Vo	Vin=24VDC, Pin5 & Pin6 +Io=-120mA	8.09	8.53	8.97	VDC
	DQ2-24D1802S	+Vo	Vin=24VDC, Pin6 & Pin7 +Io=+80mA	16.74	17.64	18.54	VDC
		-Vo	Vin=24VDC, Pin5 & Pin6 +Io=-80mA	2.21	2.42	2.54	VDC
	DQ2-24D1803S	+Vo	Vin=24VDC, Pin6 & Pin7 +Io=+100mA	17.64	18.54	19.44	VDC
		-Vo	Vin=24VDC, Pin5 & Pin6 +Io=-100mA	3.21	3.45	3.60	VDC
	DQ2-24D2004S	+Vo	Vin=24VDC, Pin6 & Pin7 +Io=+100mA	19.50	20.50	21.50	VDC
		-Vo	Vin=24VDC, Pin5 & Pin6 +Io=-100mA	4.16	4.48	4.68	VDC
DQ2-24D2005S	+Vo	Vin=24VDC, Pin6 & Pin7 +Io=+90mA	19.70	20.70	21.70	VDC	
	-Vo	Vin=24VDC, Pin5 & Pin6 +Io=-90mA	5.10	5.50	5.75	VDC	
Output Voltage Accuracy	10%-100% Load			See below: Product Characteristic Curve			
Line Regulation	Full Input Voltage Range		Positive Output	--	±1.2	±1.5	%
			Negative Output	--	±1.2	±1.5	%
Load Regulation	10%~100% Load		Positive Output	--	6	15	%
			Negative Output	--	8	15	%
Ripple & Noise	20MHz Bandwidth, 100% Load			--	100	150	mV
Temperature Coefficient	Full Load			--	±0.04	±0.1	%/℃
Short Circuit Protection				Continuous short circuit, self-recovery			

Note: Ripple & noise are measured at 20MHz of bandwidth with a 10uF electrolytic capacitor and a 1uF ceramic capacitor connected inparallel at the output.

General Specifications

Item	Operating Conditions	Min.	Typ.	Max.	Unit
Isolation Voltage	Input-Output, Test Time1 minute, leakage current < 1mA	5000	--	--	VAC
Insulation Resistance	Input-Output, Insulation Voltage 500VDC	1000	--	--	MΩ
Isolation Capacitance	Input-Output,100KHz/0.1V	--	5	10	pF
Operating Temperature	Temperature ≥Derating at 85 °C, (see: Temperature Derating Curve below)	-40	--	105	°C
Storage Temperature		-55	--	125	°C
Case Temperature Rise at Operation	Ta=25°C, Nominal Input, Full Load	--	30	--	°C
Storage Humidity	No Condensation	5	--	95	%RH

DQ2-xxDxxS Series IGBT/SiC Driver power supply

DC-DC Converter | 2W | SIP7 | IGBT/SiC Driver power supply | 5000VAC



Soldering Profile	Wave soldering	260±5℃; Time: 5 - 10s			
	Manual soldering	360±10℃; Time: 3 - 5s			
Switching Frequency	Full Load, Nominal Input Voltage	--	250	--	kHz
MTBF	MIL-HDBK-217F@25℃	>3500Kh			

Physical Characteristics

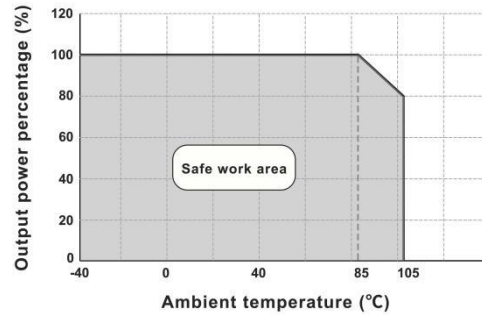
Case Material	Blackplastic; flame-retardant and heat-resistant (UL94V-0)
Mechanical Dimensions	19.50 * 9.80 * 12.50mm
Weight	4.3g (typ.)
Cooling Method	Free air convection

EMC Characteristics

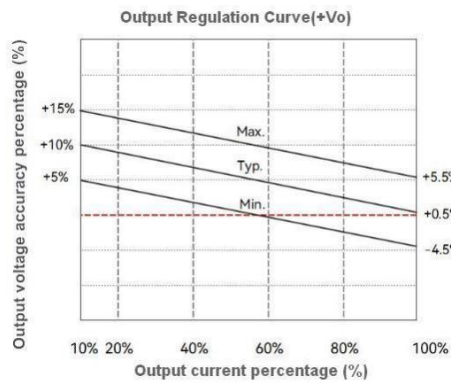
EMI	CE	CISPR32/EN55032 CLASS B (Recommended circuit see Figure 2)			
	RE	CISPR32/EN55032 CLASS B (Recommended circuit see Figure 2)			
EMS	ESD	IEC/EN61000-4-2	Contact ±8KV	Perf. Criteria B	

Product Characteristic Curve

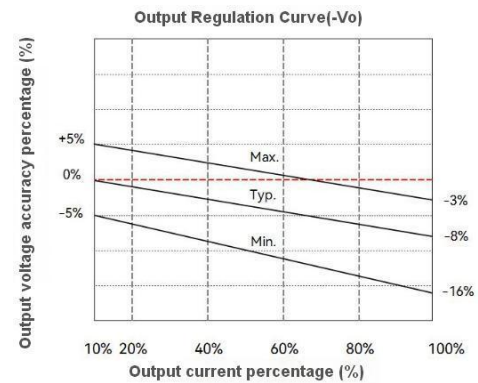
Temperature Derating Curve



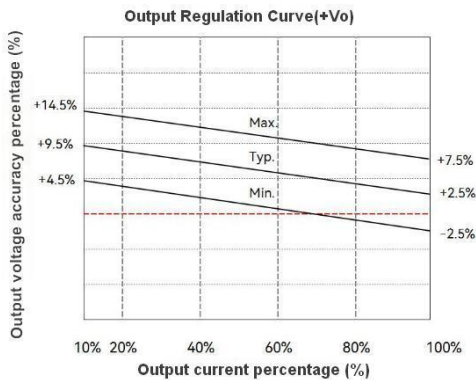
Main Road Output Regulation Curve (DQ2-05D1505S, +Vo)



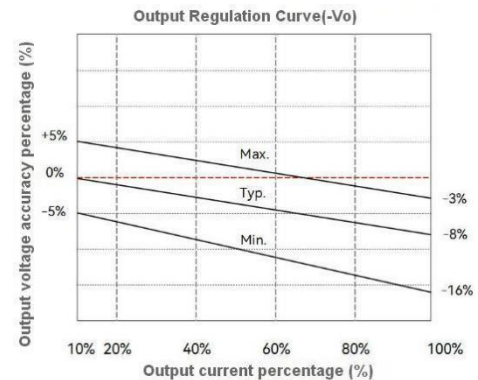
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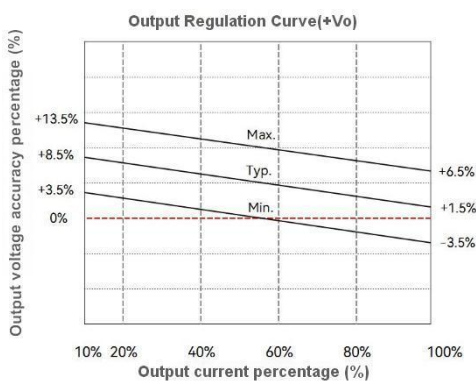
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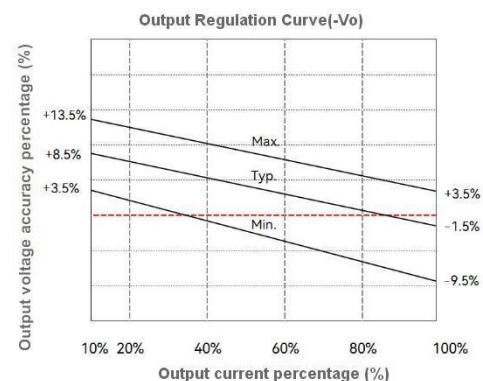
Auxiliary Road Output Regulation Curve (DQ2-05D2005S, -Vo)



Main Road Output Regulation Curve (DQ2-12D1502S, +Vo)



Auxiliary Road Output Regulation Curve (DQ2-12D1502S, -Vo)

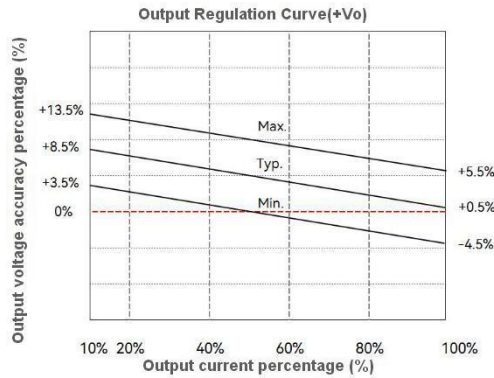


DQ2-xxDxxS Series IGBT/SiC Driver power supply

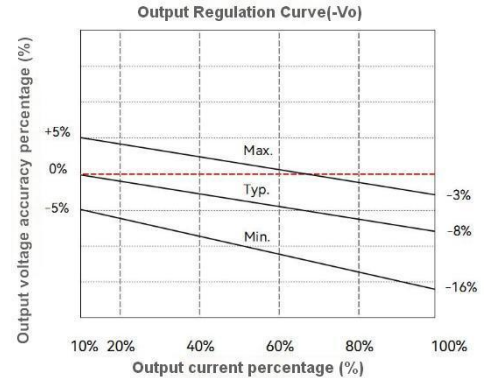
DC-DC Converter | 2W | SIP7 | IGBT/SiC Driver power supply | 5000VAC



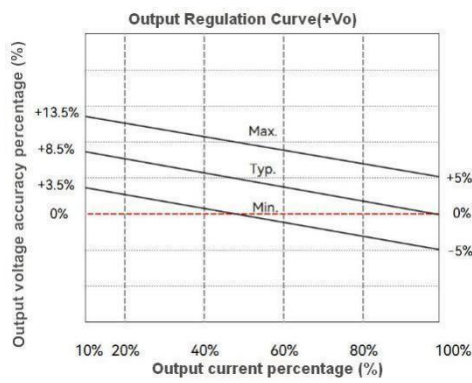
Main Road Output Regulation Curve (DQ2-12D1503S, +Vo)



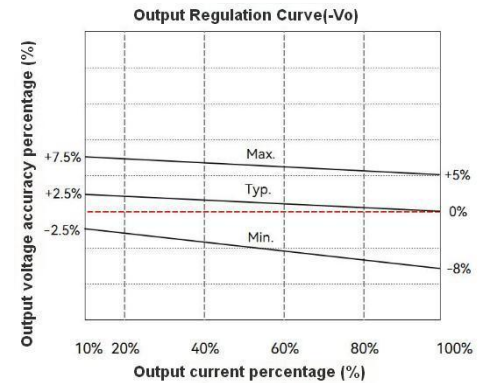
Auxiliary Road Output Regulation Curve (DQ2-12D1503S, -Vo)



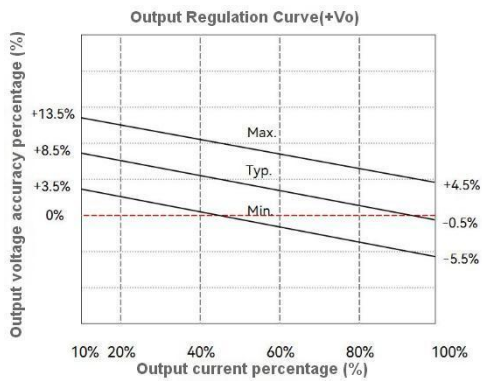
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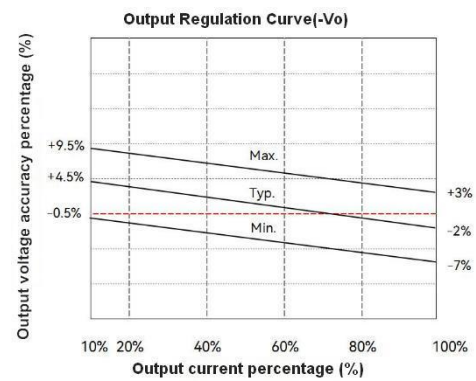
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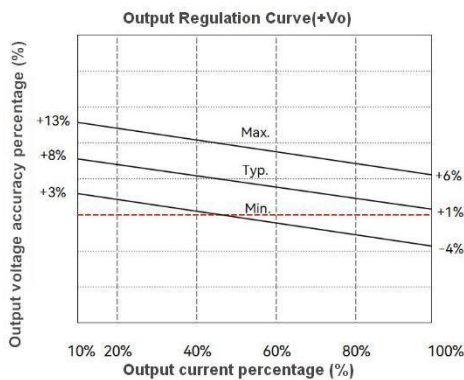
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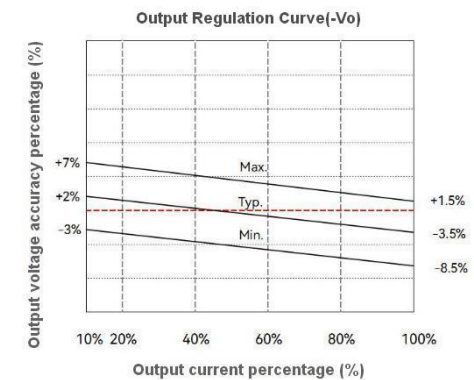
Auxiliary Road Output Regulation Curve (DQ2-12D1508S, -Vo)



Main Road Output Regulation Curve (DQ2-12D1509S, +Vo)



Auxiliary Road Output Regulation Curve (DQ2-12D1509S, -Vo)

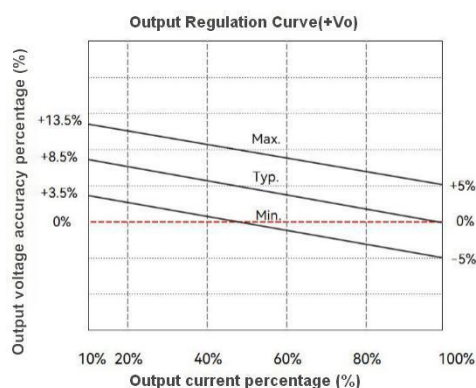


DQ2-xxDxxS Series IGBT/SiC Driver power supply

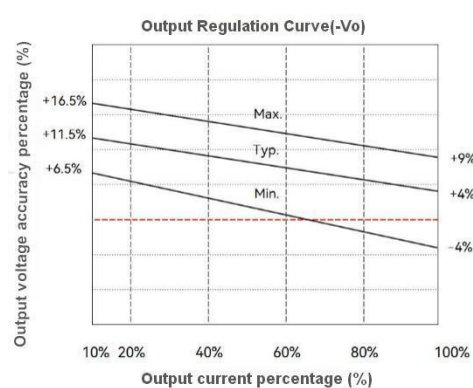
DC-DC Converter | 2W | SIP7 | IGBT/SiC Driver power supply | 5000VAC



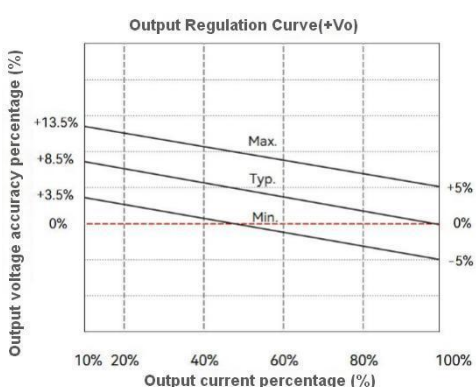
Main Road Output Regulation Curve (DQ2-12D1802S, +Vo)



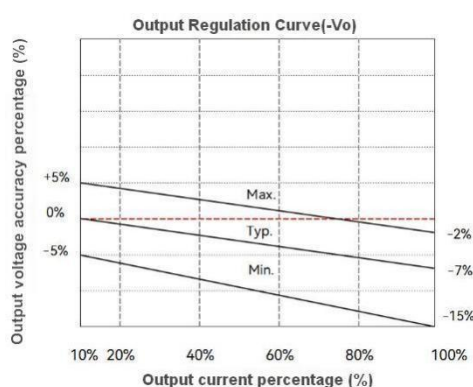
Auxiliary Road Output Regulation Curve (DQ2-12D1802S, -Vo)



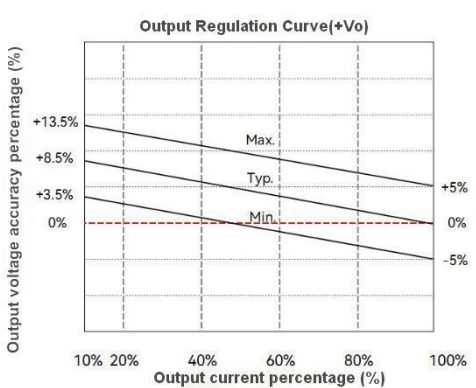
Main Road Output Regulation Curve (DQ2-12D1803S, +Vo)



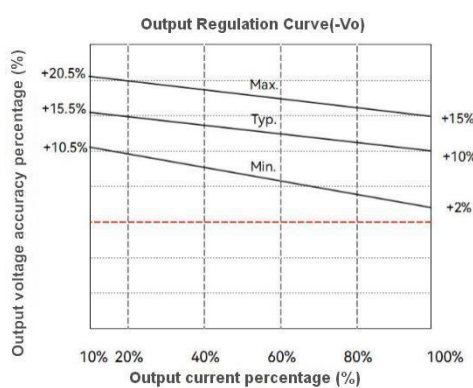
Auxiliary Road Output Regulation Curve (DQ2-12D1803S, -Vo)



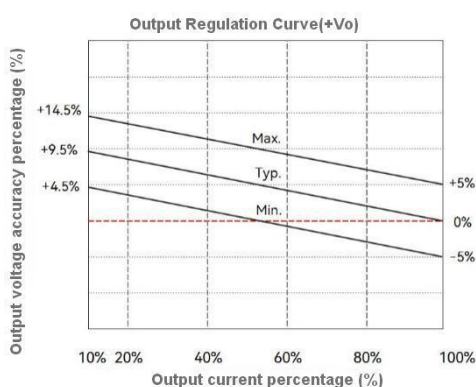
Main Road Output Regulation Curve (DQ2-12D1805S, +Vo)



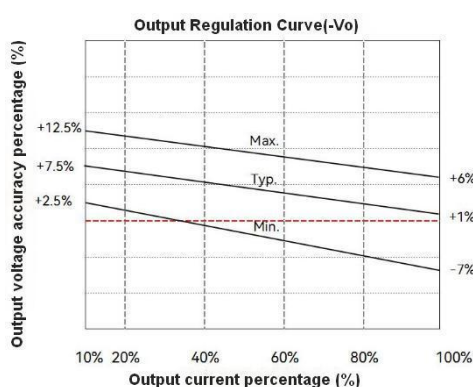
Auxiliary Road Output Regulation Curve (DQ2-12D1805S, -Vo)



Main Road Output Regulation Curve (DQ2-12D2004S, +Vo)



Auxiliary Road Output Regulation Curve (DQ2-12D2004S, -Vo)

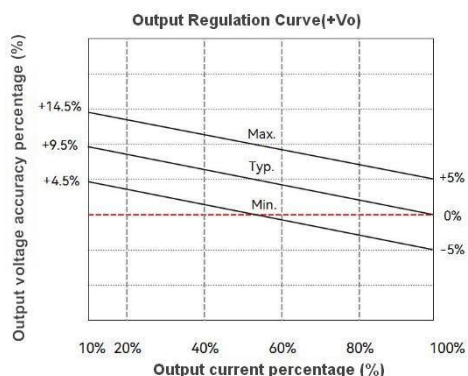


DQ2-xxDxxS Series IGBT/SiC Driver power supply

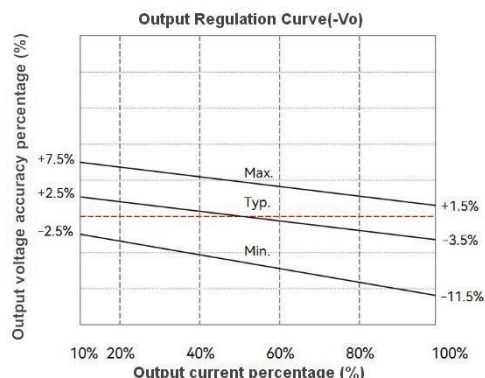
DC-DC Converter | 2W | SIP7 | IGBT/SiC Driver power supply | 5000VAC



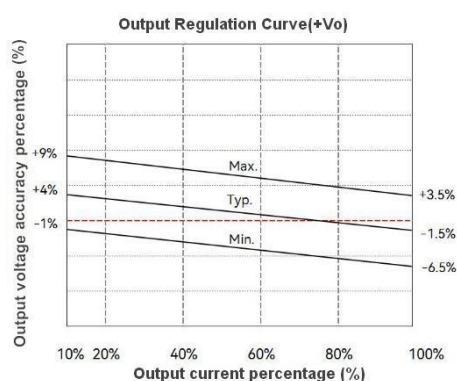
Main Road Output Regulation Curve (DQ2-12D2005S, +Vo)



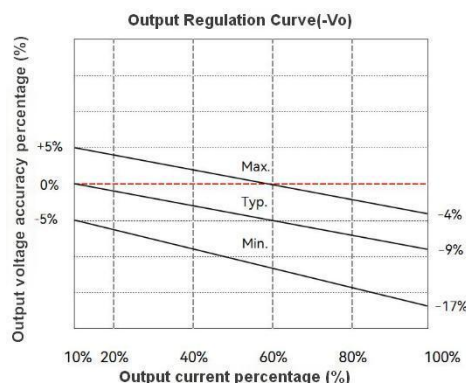
Auxiliary Road Output Regulation Curve (DQ2-12D2005S, -Vo)



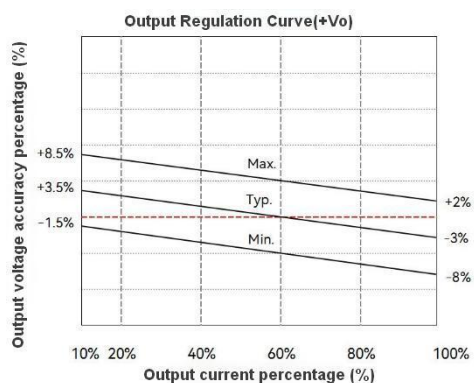
Main Road Output Regulation Curve (DQ2-15D1502S, +Vo)



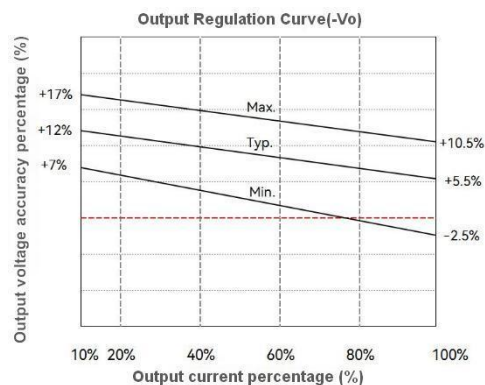
Auxiliary Road Output Regulation Curve (DQ2-15D1502S, -Vo)



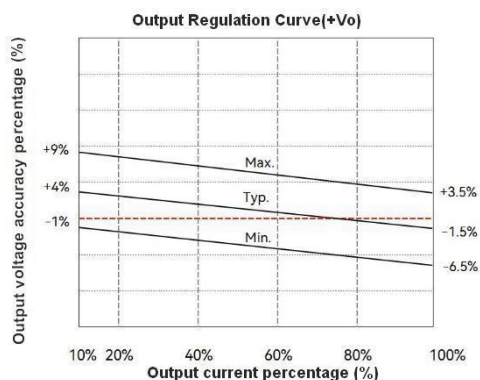
Main Road Output Regulation Curve (DQ2-15D1504S, +Vo)



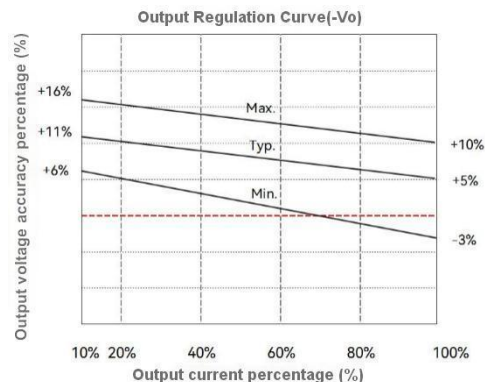
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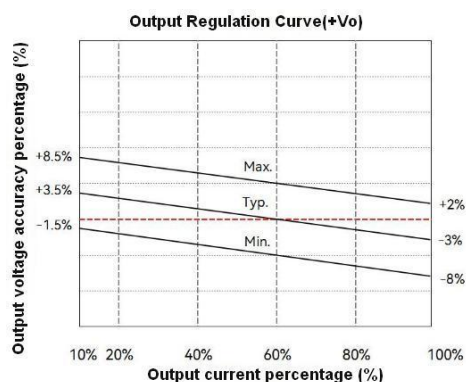
Main Road Output Regulation Curve (DQ2-15D1505S, +Vo)



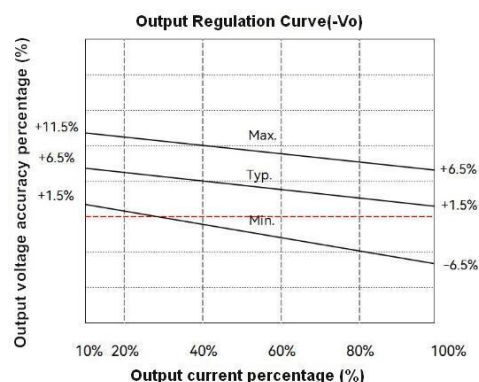
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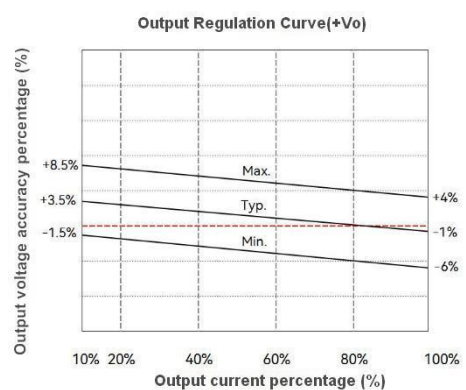
Main Road Output Regulation Curve (DQ2-15D1508S, +Vo)



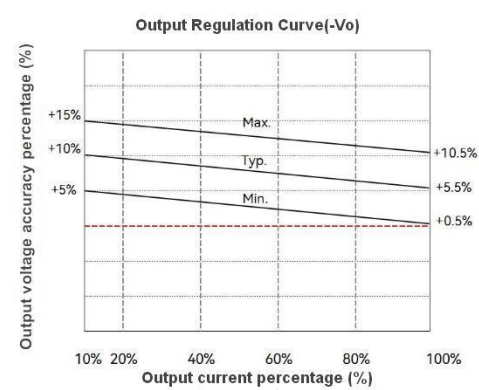
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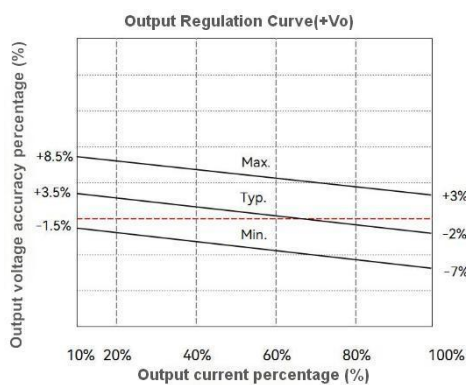
Main Road Output Regulation Curve (DQ2-15D1509S, +Vo)



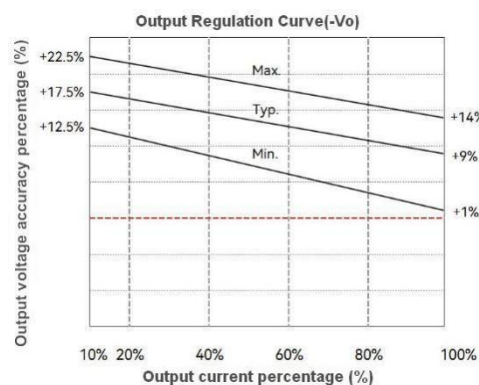
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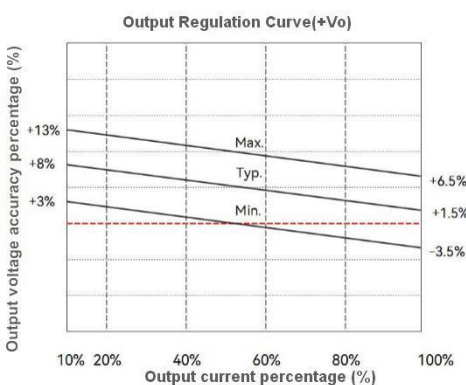
Main Road Output Regulation Curve (DQ2-15D1803S, +Vo)



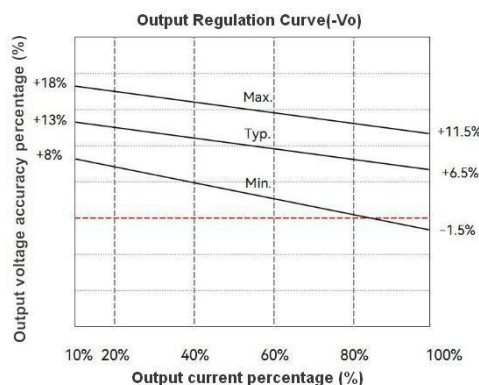
Auxiliary Road Output Regulation Curve (DQ2-15D1803S, -Vo)



Main Road Output Regulation Curve (DQ2-15D2004S, +Vo)



Auxiliary Road Output Regulation Curve (DQ2-15D2004S, -Vo)

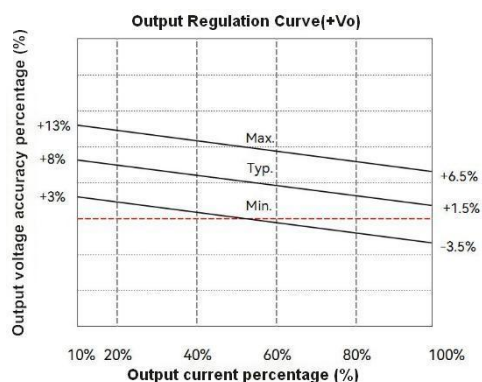


DQ2-xxDxxS Series IGBT/SiC Driver power supply

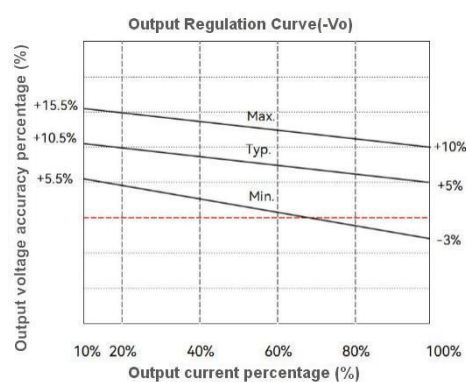
DC-DC Converter | 2W | SIP7 | IGBT/SiC Driver power supply | 5000VAC



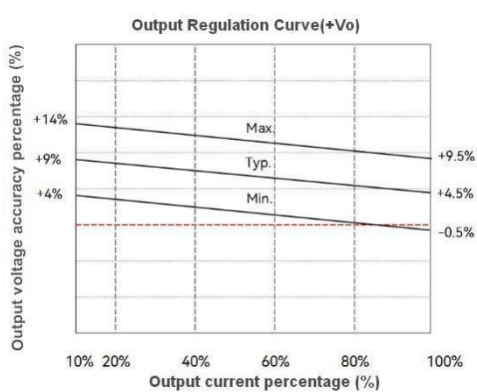
Main Road Output Regulation Curve (DQ2-15D2005S, +Vo)



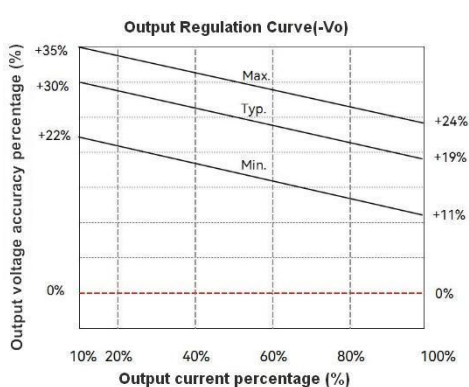
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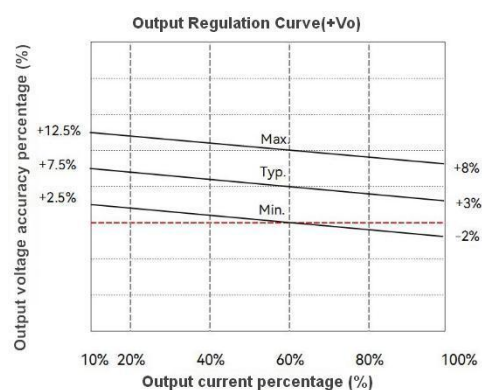
Main Road Output Regulation Curve (DQ2-24D1002S, +Vo)



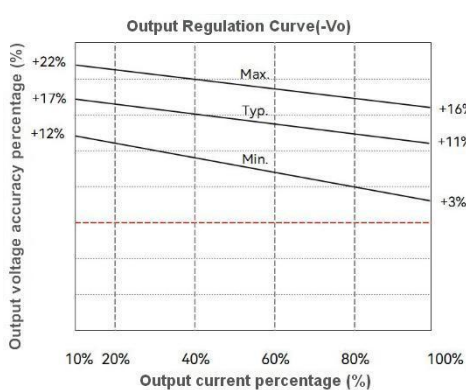
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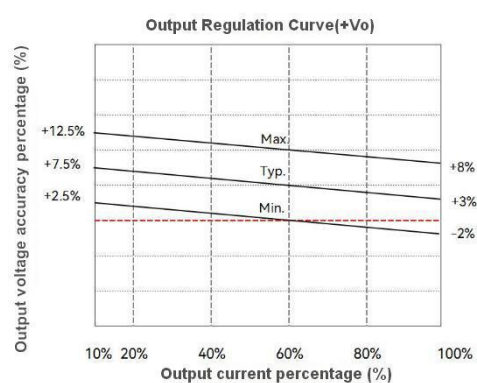
Main Road Output Regulation Curve (DQ2-24D1504S, +Vo)



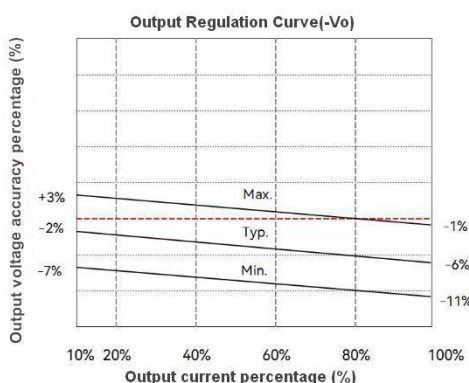
Auxiliary Road Output Regulation Curve (DQ2-24D1504S, -Vo)



Main Road Output Regulation Curve (DQ2-24D1508S, +Vo)



Auxiliary Road Output Regulation Curve (DQ2-24D1508S, -Vo)

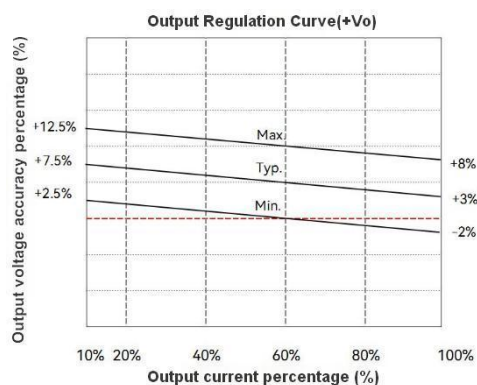


DQ2-xxDxxS Series IGBT/SiC Driver power supply

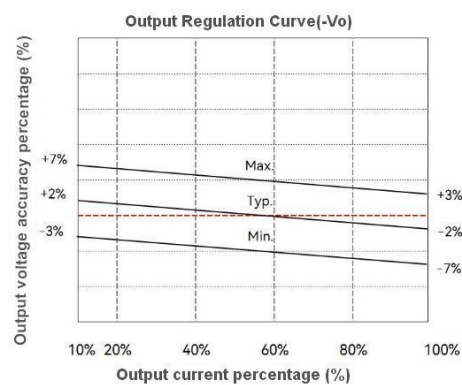
DC-DC Converter | 2W | SIP7 | IGBT/SiC Driver power supply | 5000VAC



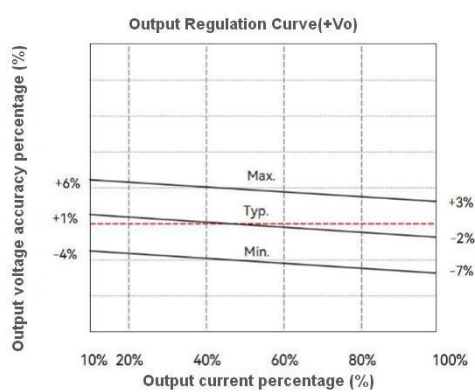
Main Road Output Regulation Curve (DQ2-24D1509S, +Vo)



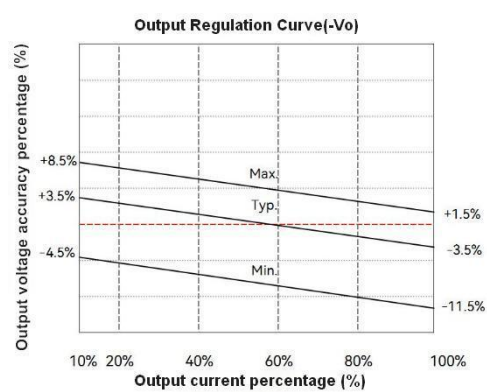
Auxiliary Road Output Regulation Curve (DQ2-24D1509S, -Vo)



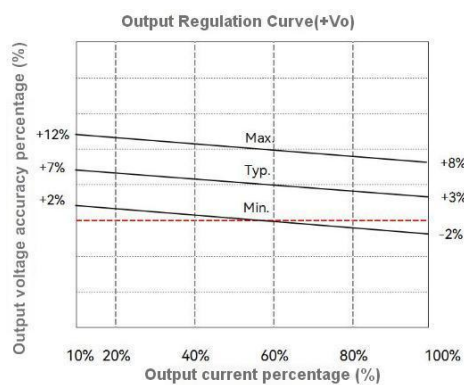
Main Road Output Regulation Curve (DQ2-24D1802S, +Vo)



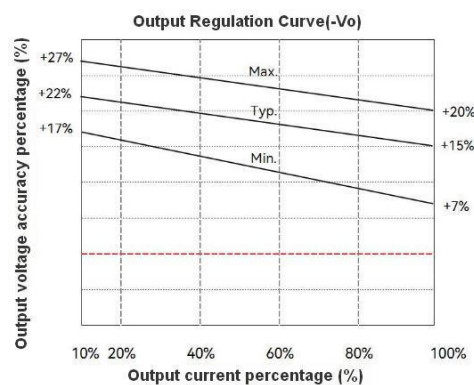
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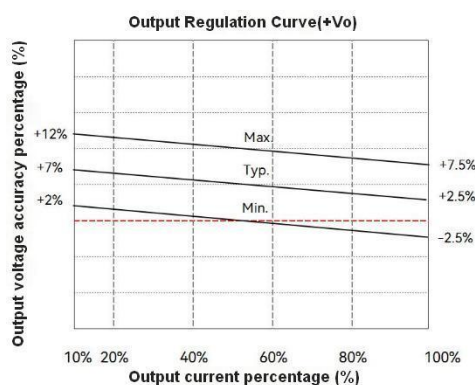
Main Road Output Regulation Curve (DQ2-24D1803S, +Vo)



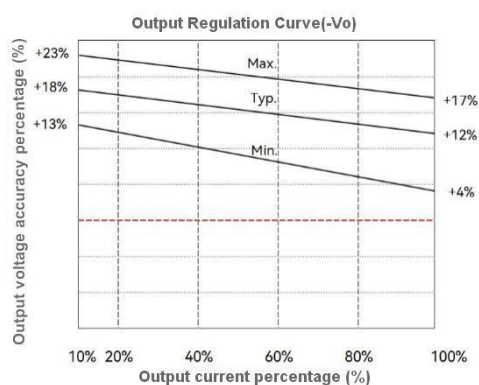
Auxiliary Road Output Regulation Curve (DQ2-24D1803S, -Vo)



Main Road Output Regulation Curve (DQ2-24D2004S, +Vo)



Auxiliary Road Output Regulation Curve (DQ2-24D2004S, -Vo)

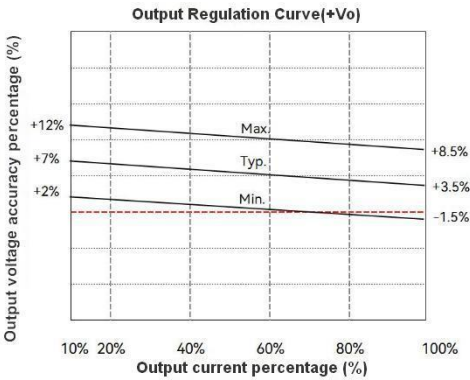


DQ2-xxDxxS Series IGBT/SiC Driver power supply

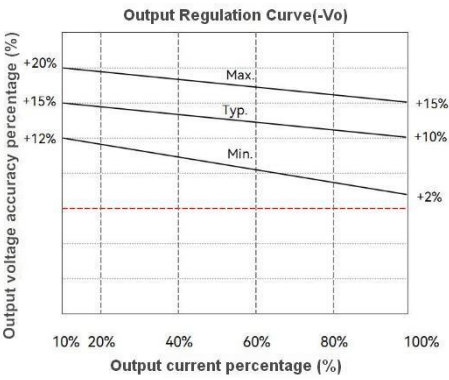
DC-DC Converter | 2W | SIP7 | IGBT/SiC Driver power supply | 5000VAC



Main Road Output Regulation Curve (DQ2-24D2005S, +Vo)

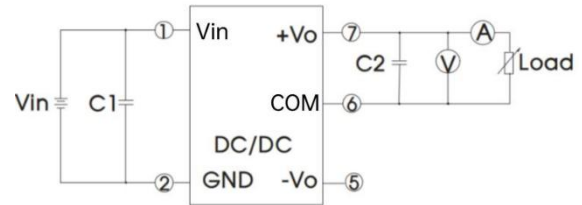
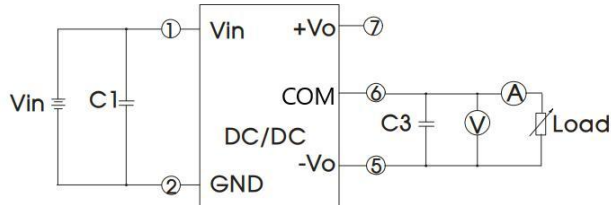


Auxiliary Road Output Regulation Curve (DQ2-24D2005S, -Vo)



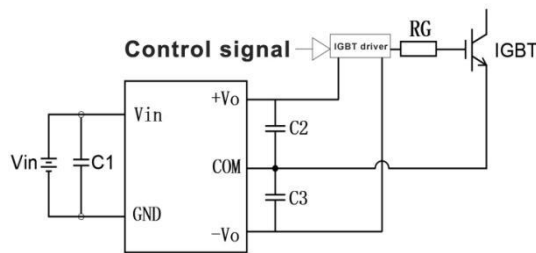
Design Reference - Test configurations

Test Circuit Configuration



Design Reference – Application circuit

EMC Recommended Circuit Design and Application



(Figure 1)

Recommended Capacitive Load Value Table

C1/C2/C3: 100μF/35V (Low ESR Capacitor)

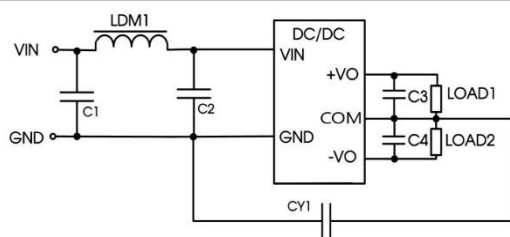
Note: A ceramic capacitor with a value between 1μF~10μF can be connected in parallel across capacitors C2 and C3 to reduce ripple noise.

Note:

1. When in use, keep the leads connecting the power module and the IGBT driver as short as possible;
2. Place the output filter capacitor as close as possible to the power module and the IGBT driver;
3. The gate drive current peak of the IGBT driver is high; it is recommended to use low-ESR electrolytic capacitors for the output filter capacitor of the power module;
4. The average output power of the driver must be less than the output power of the power module;
5. If used in vibration environments, consider fixing the module with glue nearby;
6. The maximum capacitive load is tested within the input voltage range and under full load conditions.

Design Reference – EMC Solutions – Recommended circuit

EMI Recommended Circuit Design and Application



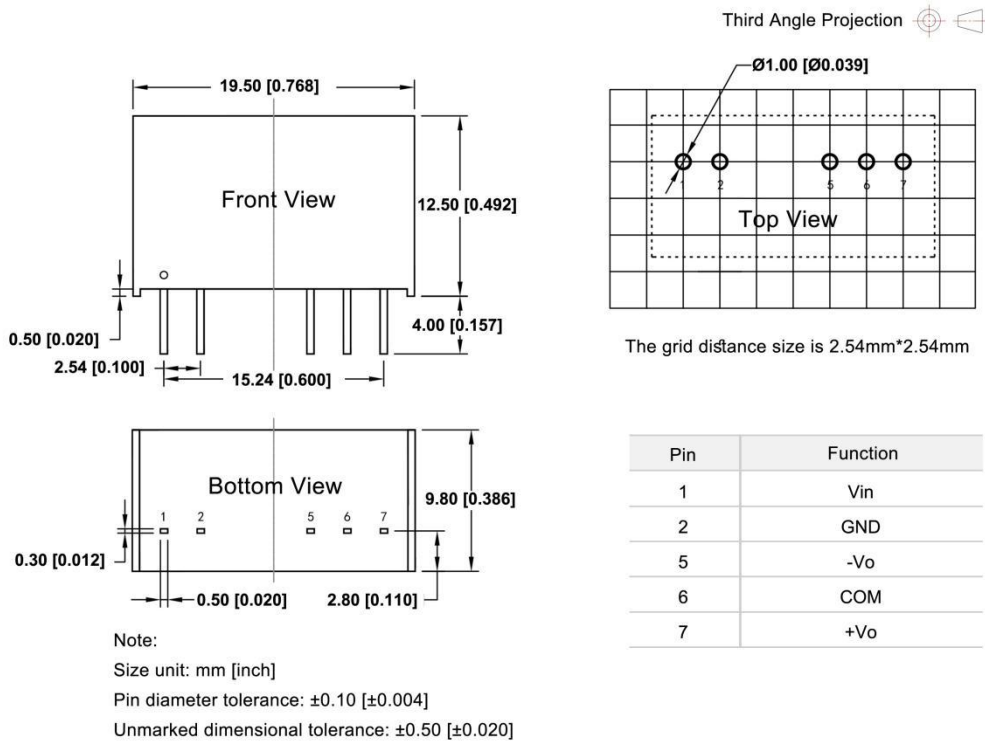
(Figure 2)

Recommended Parameter Table

Input Voltage	5/12/15/24VDC
C1, C2	4.7μF/50V
C3, C4	10μF /50V
LDM1	33μH
CY1	330pF

Dimensions and Recommended Layout

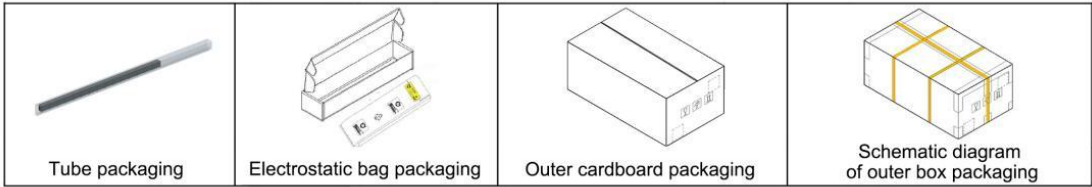
DQ2-xxDxxS Dimensions and Recommended Layout



Packaging Information

Model Series (Tube Packaging)	Single tube product quantity (pcs/tube)	ESD bag product quantity (pcs/bag)	Inner carton product quantity (pcs/carton)	Full carton product quantity(pcs)
DQ2-xxDxxS	26	260	780	3120

The schematic diagram of tube packaging is shown below:



Product precautions

1. The input voltage should not exceed the specified range value, otherwise it may cause permanent and irreparable damage;
2. It is recommended to use at a load of over 5%. If the load is below 5%, the ripple index of the product may exceed the specifications, but it does not affect the reliability of the product;
3. The maximum capacitive load is tested within the input voltage range and under full load conditions;
4. Unless otherwise specified, all indicators in this manual are measured at $T_a=25\text{ }^{\circ}\text{C}$, humidity<75% RH, nominal input voltage, and output rated load;
5. All indicator testing methods in this manual are based on our company's corporate standards;
6. Our company can provide product customization, and specific requirements can be directly contacted by our technical personnel;
7. Product specifications are subject to change without prior notice.

Manufacturer contact information

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Telephone: +86 - 020 - 321666256

Email: info@bettpower.com

Address: Building A1, Jiete Industrial Park, 1 Doutang Road, Huangpu District, Guangzhou, China

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