



芯高科技
HIGH TECH
TECHNOLOGY LIMITED

HT 6329

Characterization Report

2023/09/27 Internal Use Only

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HT 6329

Testing conditions:		Ch1 & Ch2
Input voltage range	6 V ~30 V	
Output current range	0 A ~ 6A	
Package	QFN32 5mm x 5mm	
Load Regulation	< 2%	
Features	Dual channel External HS & LS power FET Switching frequency:150K / 250K / 350K	
Datasheet	https://static1.squarespace.com/static/64ae28d3d28f3820aff6e31e/t/64f550e4bc847b7ef7b4616f/1693798632293/HT6329_datasheet.pdf	

HT6329 – Functional Block Diagram

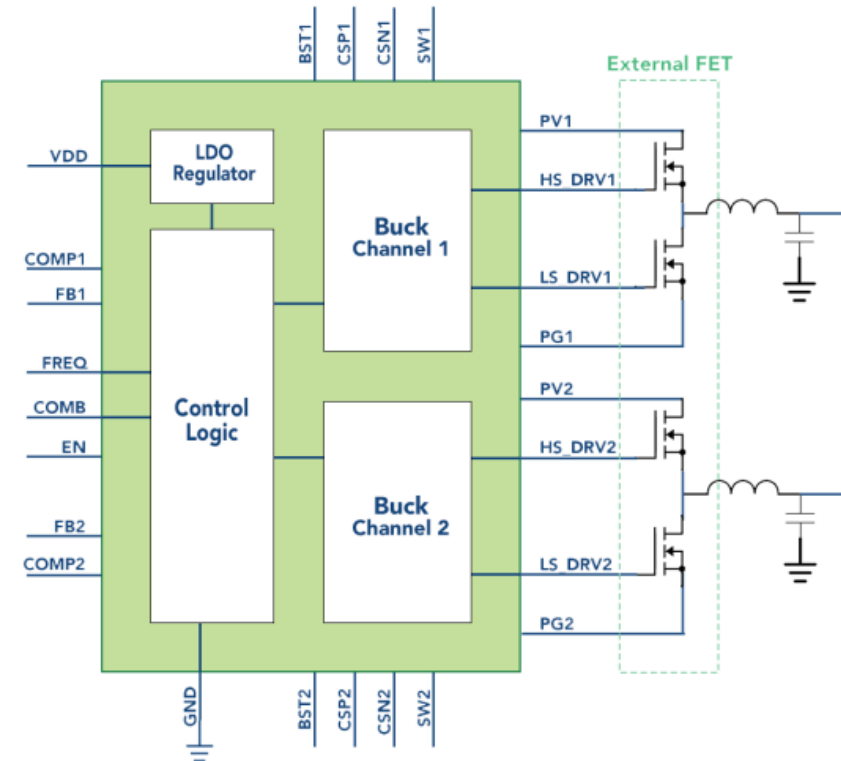


Fig. 1 Functional Block Diagram (COMB=0)

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Parameters checked at standby

Parameter	HT 6329
VDD (V)	5.4
Ivin (mA)	1.65
Fsw (kHz)	350
VOUT1 (V)	5
VOUT2 (V)	5
$\Delta V_{out}(mV) @6.5V_{IN}$	<50mV
$\Delta V_{out}(mV) @26V_{IN}$	<200mV

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Waveform at standby (VOUT, dc)



VIN = 12V

Fsw = 350kHz

VIN = 26V

Yellow: VOUT(dc), Blue: COMP, Red: LS_Drv

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Waveform at standby (VOUT, ac)



VIN = 12V

Fsw = 350kHz

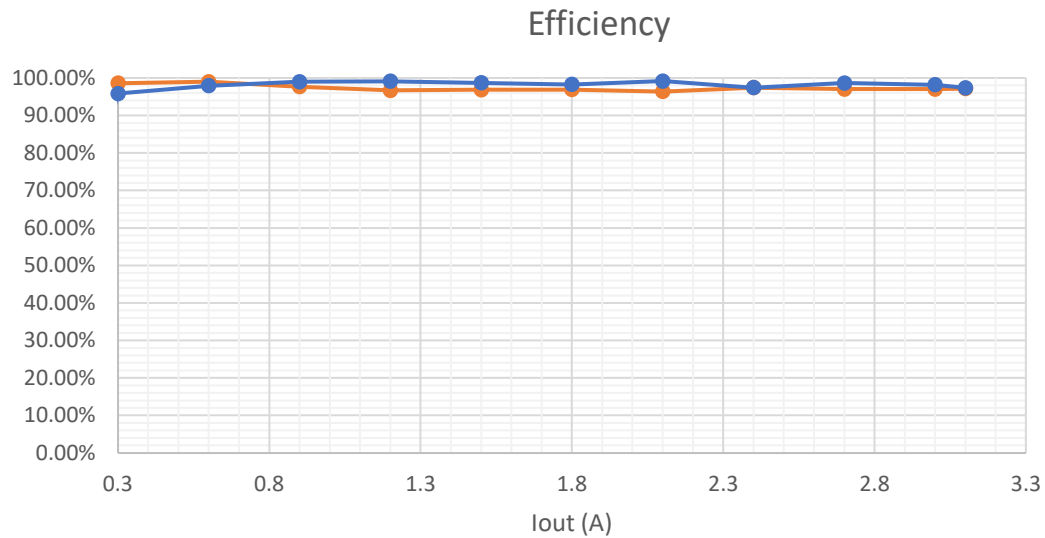
VIN = 26V

Yellow: VOUT(ac), Blue: COMP, Red: LS_Drv

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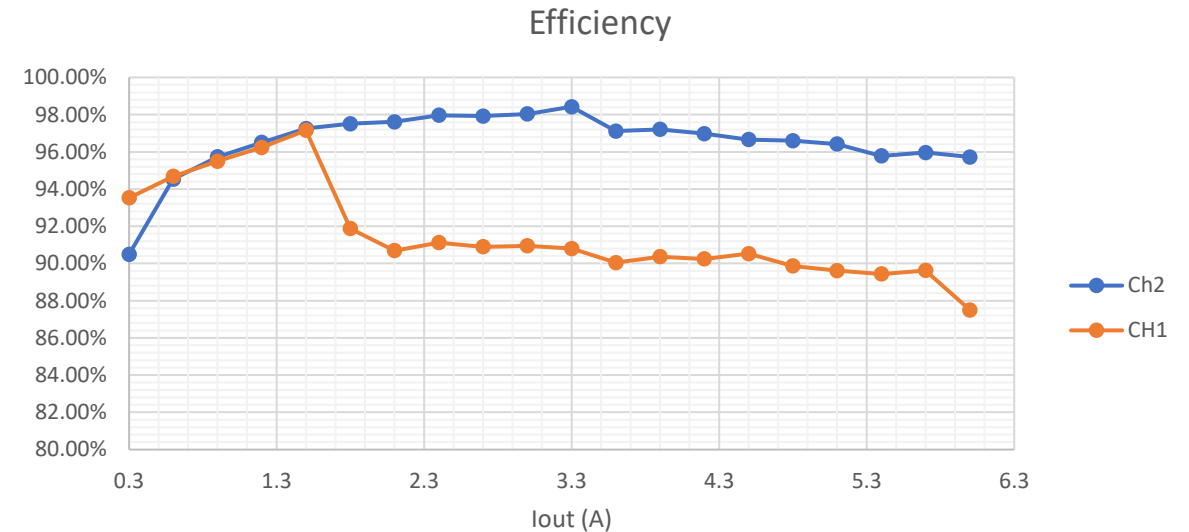
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Power Efficiency test



$V_{in} = 6.6V$
 $I_{out} = 0.3 \text{ to } 3A$
 $V_{out} = 5V$

$F_{sw} = 350kHz$



$V_{in} = 12V$
 $I_{out} = 0.3 \text{ to } 6A$
 $V_{out} = 5V$

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Light Load Efficiency

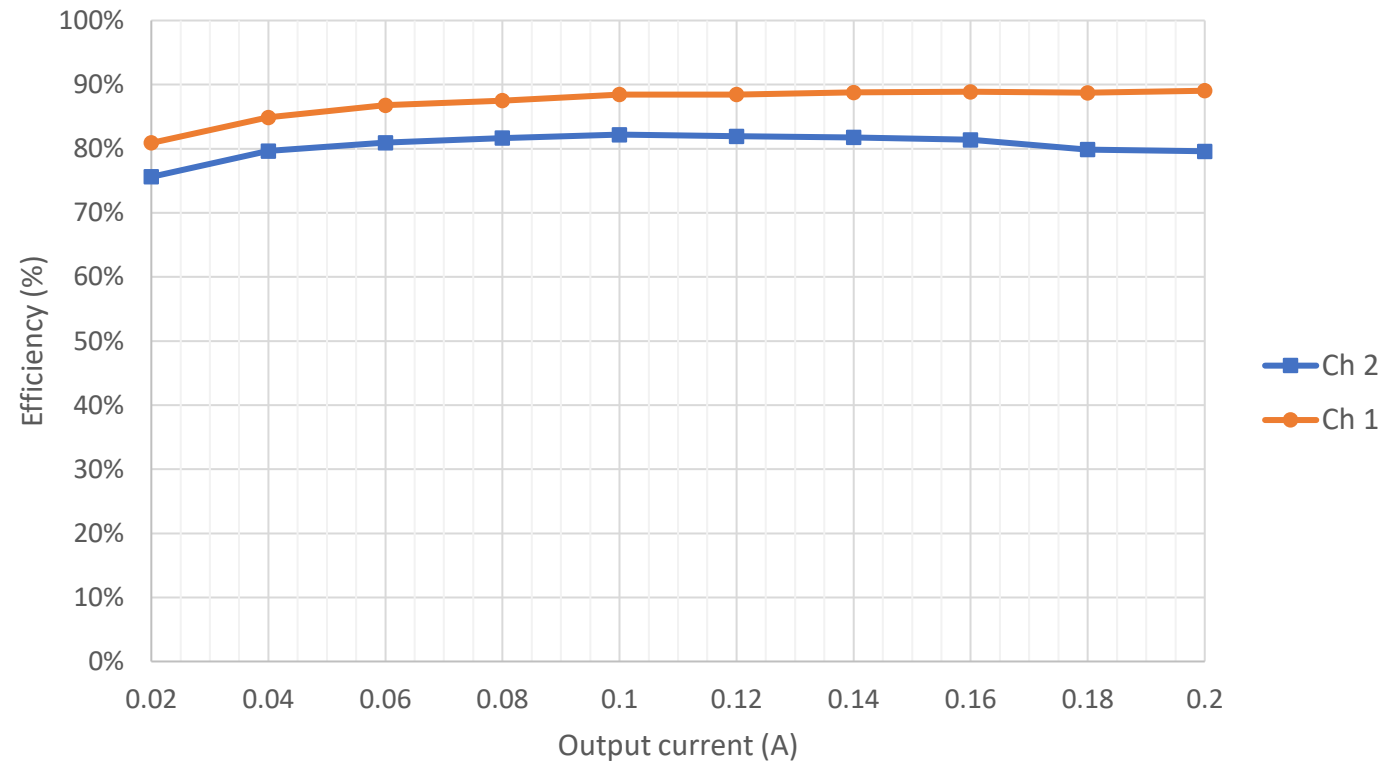
Fsw = 350kHz

Vin = 12V

Vout = 5V

Iout = 0.02 to 0.2A

Light Load Efficiency @Vin 12V



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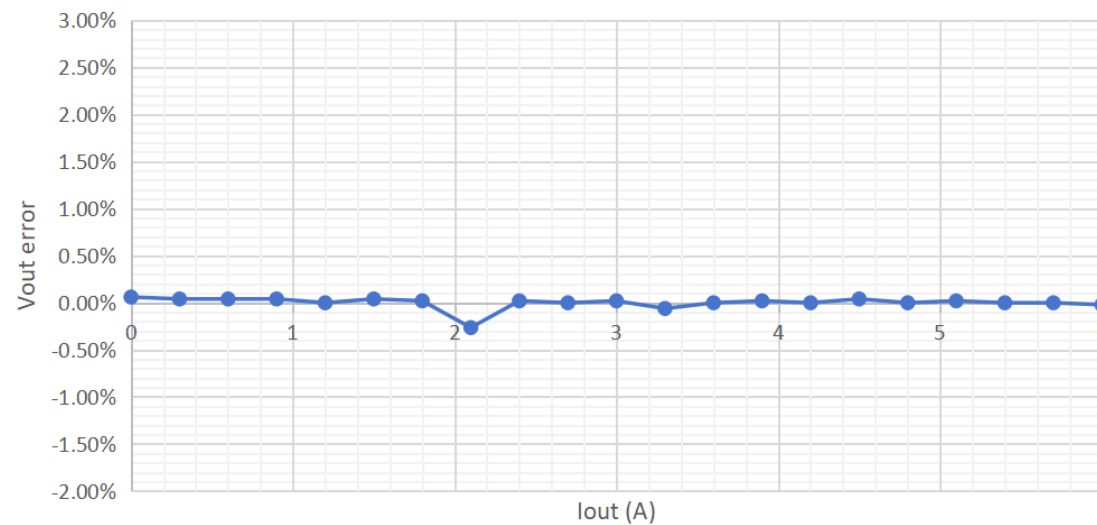
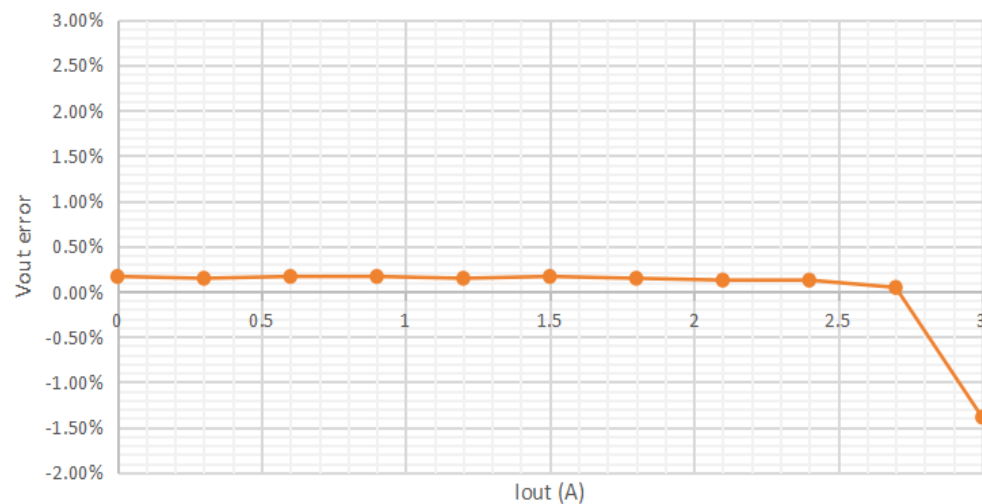
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Output voltage error

Load regulation at Vin=6.6V

Fsw = 350kHz

Load regulation at Vin=12V



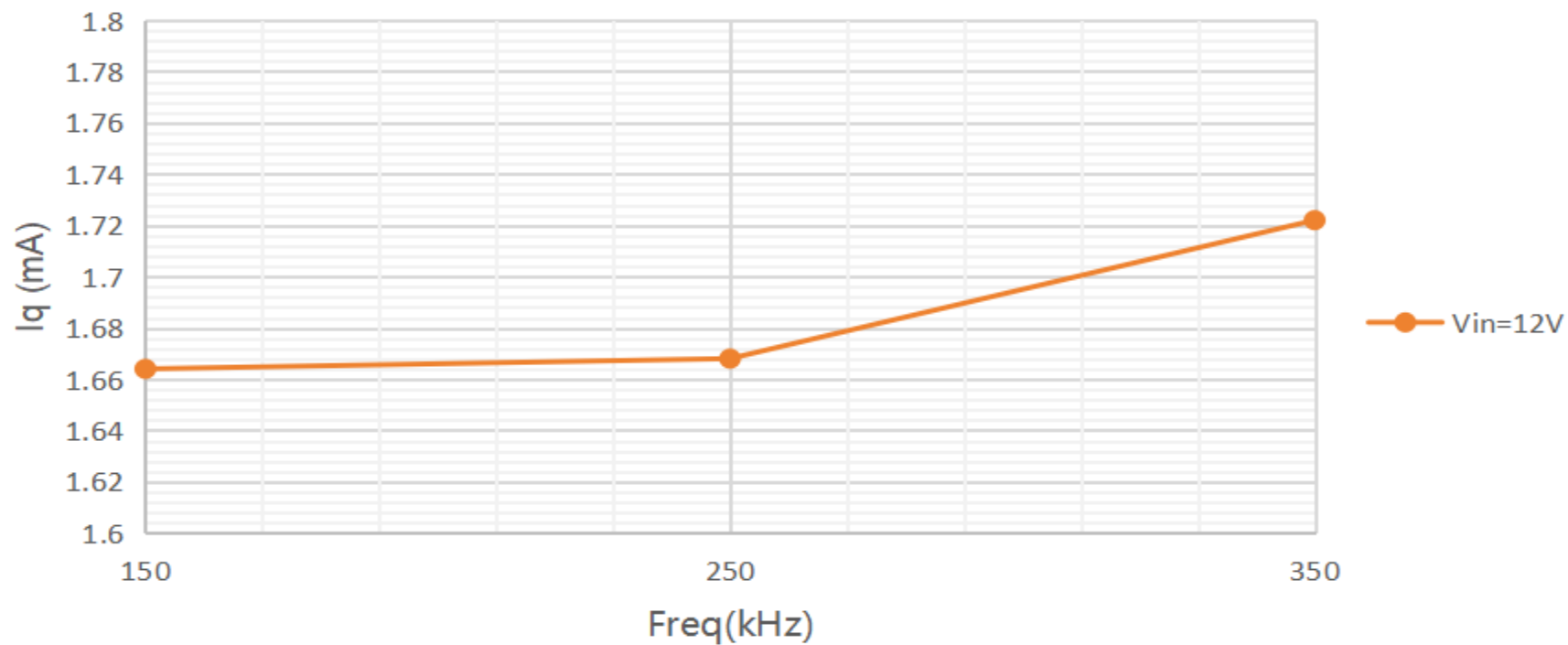
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Quiescent Current (Standby)

Quiescent Current

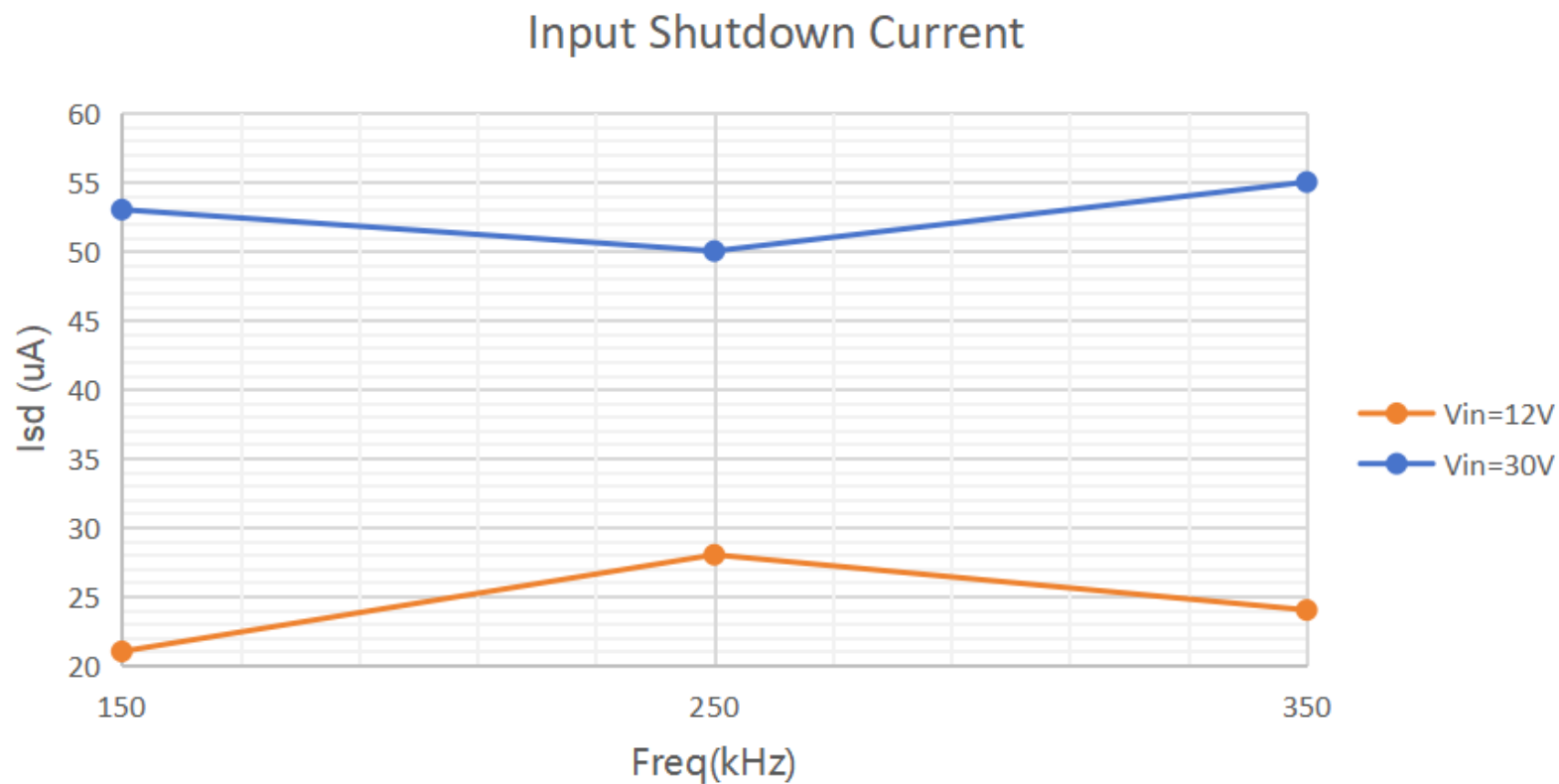


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Input shutdown Current



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HIGH TECH
TECHNOLOGY LIMITED

芯度技術 高度品質

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hightt.com

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Email: httadmin@hightt.com Hong Kong Science Park, Shatin, Hong Kong

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