VIDEO DIFFERENTIAL OUTPUT DRIVER

■GENERAL DESCRIPTION

The NJM2504 is video differential output driver. The single-end signal is converted to the differential signal. The single-end signal can be transmitted by the differential signal by the connection with NJM2507.

And, it is converted to the single-end signal by the NJM2507.

The common mode noise can be removed because of the differential motion transmission, and it is the best for the transmission of car AV system.

■PACKAGE OUTLINE

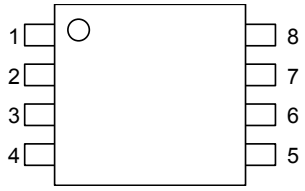
NJM2504RB1
MSOP8(TVSP8)

■FEATURES

- Operating Voltage 4.5 to 9.5V
- Input: Single-end signal, Output: Differential signal
- Internal 6dB Amplifier
- Internal 75ohm Driver
- Internal SAG Correction Circuit
- Bipolar Technology
- Package Outline MSOP8(TVSP8)*

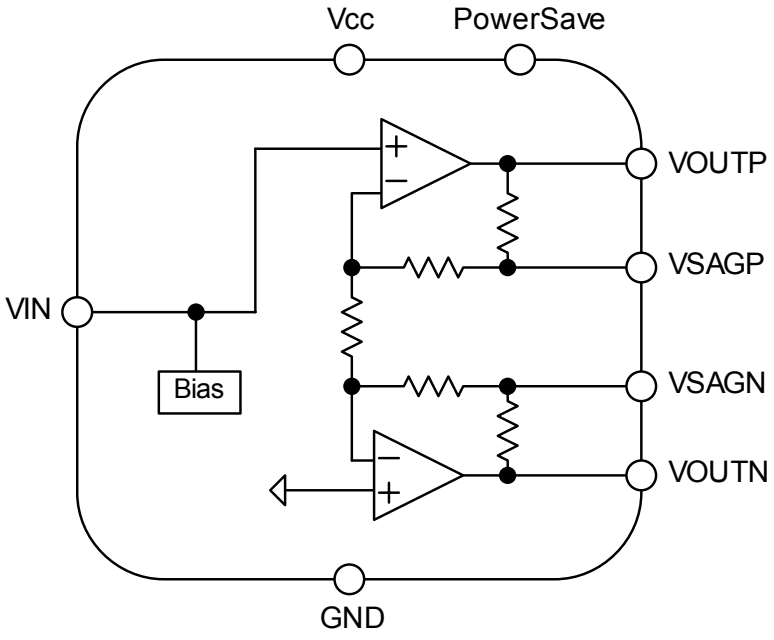
*MEET JEDEC MO-187-DA / THIN TYPE

■PIN CONNECTION



1: V+
2: Power Save
3: VIN
4: GND
5: Vsagn
6: Voutn
7: Vsagp
8: Voutp

■BLOCK DIAGRAM



■ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

PARAMETER	SYMBOL	RATINGS	UNIT
Supply Voltage	V^+	10	V
Power Dissipation	P_D	580(Note1)	mW
Operating Temperature Range	Topr	-40 to +85(Note2)	°C
Storage Temperature Range	Tstg	-40 to +150	°C

(Note 1) At on a board of EIA/JEDEC specification. (114.3 x 76.2 x 1.6mm 2 layers, FR-4)
(Note 2) It has high operating temperature range product. (-40 to +105°C)

■RECCOMENDED OPERATING CONDITIONS (Ta=25°C)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Operating voltage	Vopr		4.5	-	9.0	V

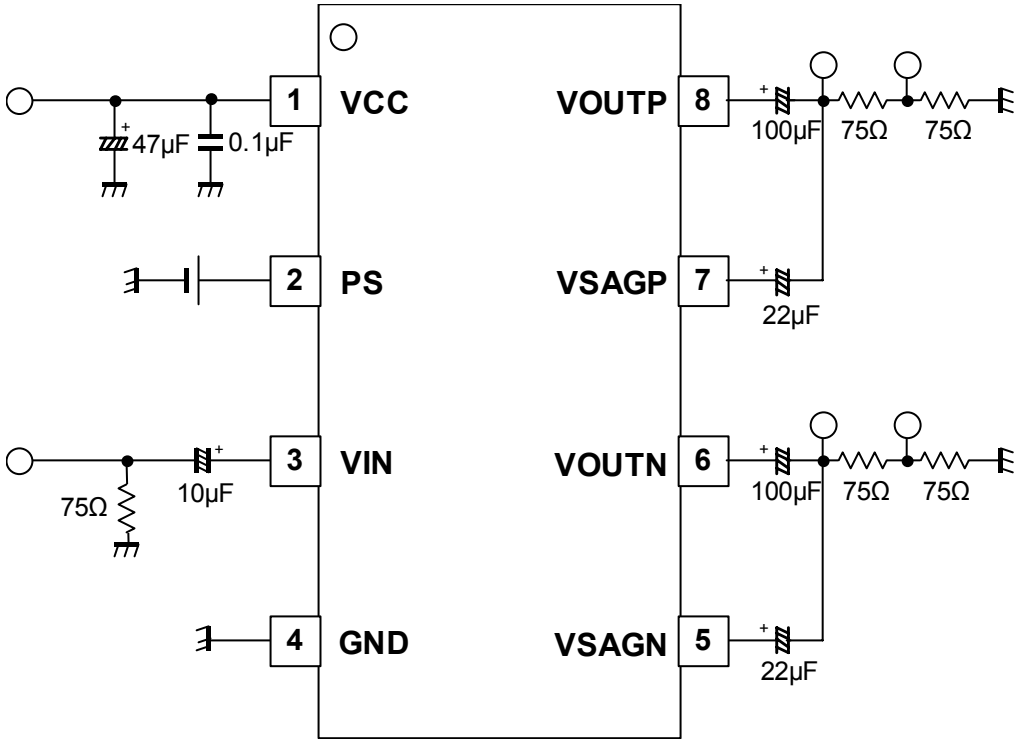
■ELECTRICAL CHRACTERISTCS (V^+ =5V, RL=150ohm,Ta=25°C)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Supply Current	I_{CC}	No signal	-	16	20	mA
Supply Current at Power Save Mode	Isave	Power save mode	-	0.3	0.5	mA
Maximum Output Level	Vom	Vin=100kHz,sin-signal, THD=1%,	2.2	2.4	-	Vp-p
Voltage Gain	Gv	Vin=1MHz, 1.0Vp-p sin-signal	5.7	6.2	6.7	dB
Frequency Characteristics	Gf	Vin=10MHz/1MHz, 1.0Vpp sin-signal	-1.0	0	1.0	dB
Differential Gain	DG	Vin=1.0Vp-p 10step video signal	-	0.5	-	%
Differential Phase	DP	Vin=1.0Vp-p 10step video signal	-	0.5	-	deg
SW Voltage High Level	VthH		2.2	-	V^+	V
SW Voltage Low Level	VthL		0	-	1.0	V
SW Sink Current High Level	IthH	V=5V	-	-	120	µA
SW Sink Current Low Level	IthL	V=0.3V	-	-	8.0	µA

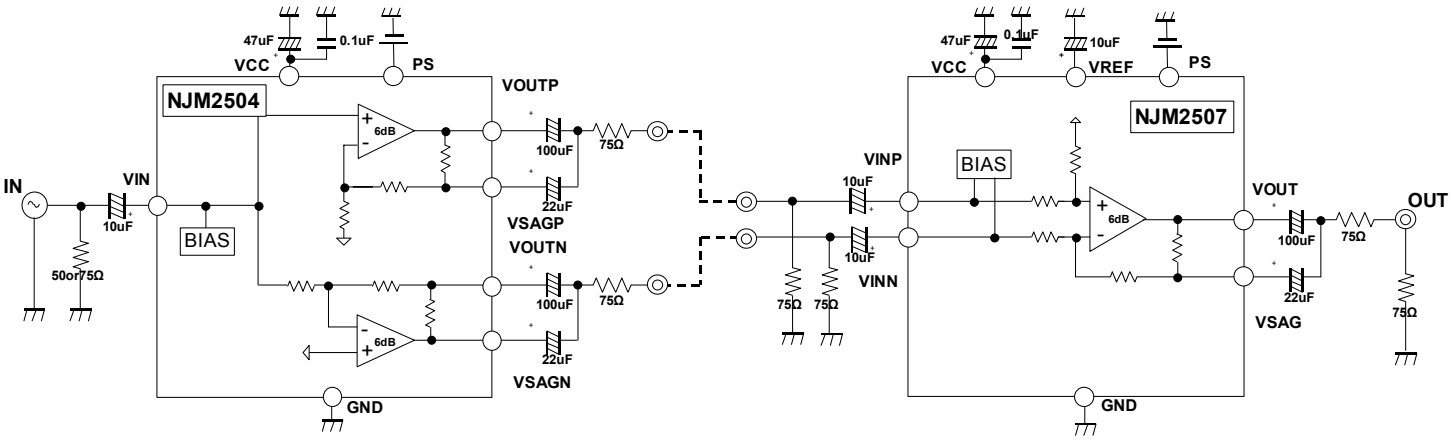
■CONTROL CHRACTERISTC

PARAMETER	STATUS	MODE
Power Save	H	Power save: OFF Active mode
	L	Power save: ON Non-Active mode (Mute)
	OPEN	Power save: ON Non-Active mode (Mute)

■TEST CIRCUIT

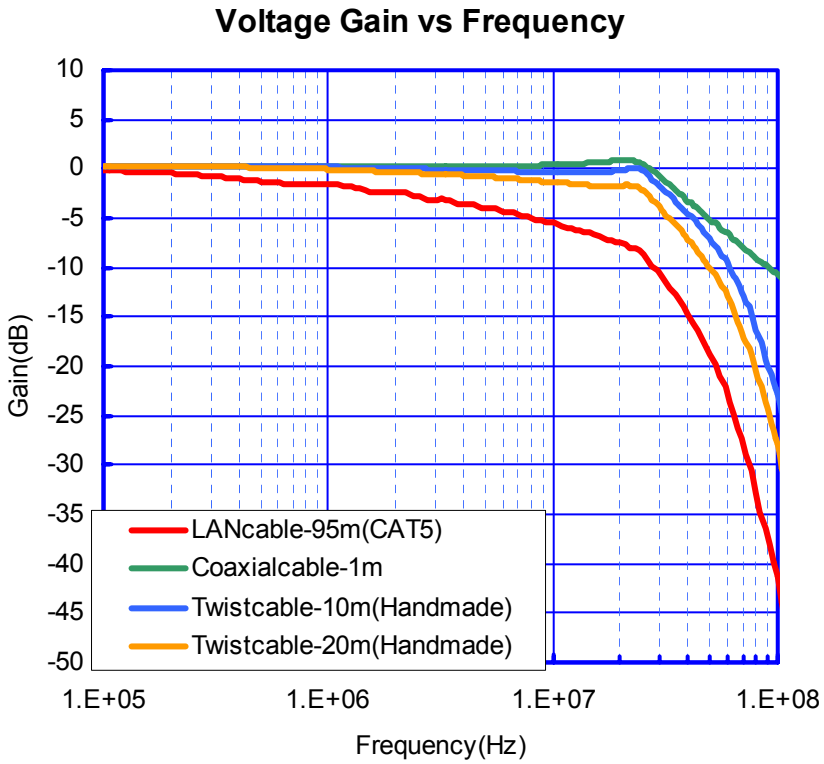


■APPLICATION CIRCUIT

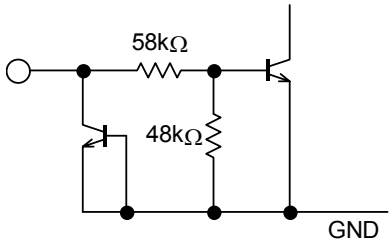
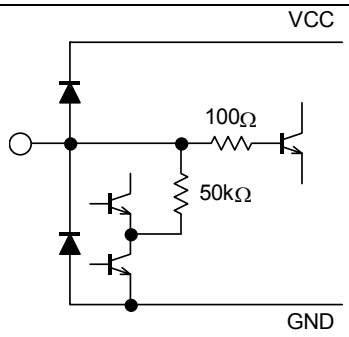
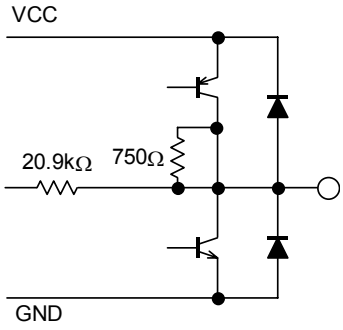
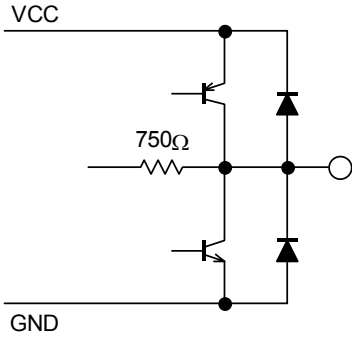
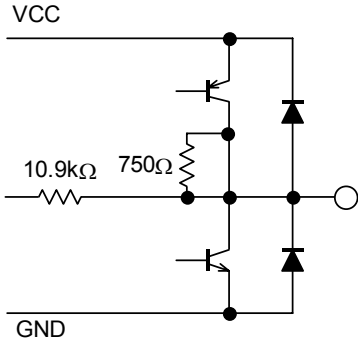


■APPLICATION

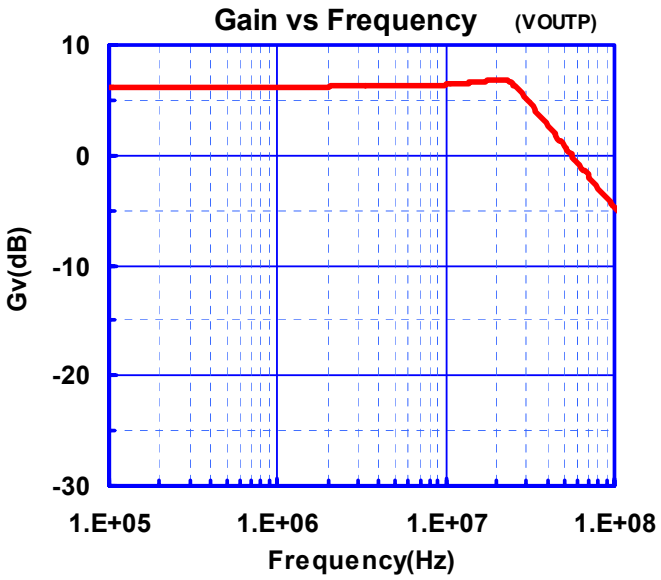
When use cable of than 20 meter, voltage gain is attenuated. Please make a adequate evaluation.
Refer to fig.

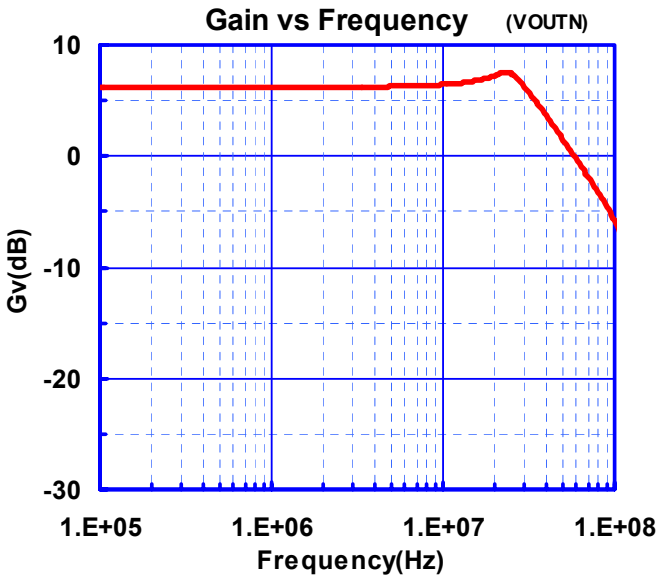


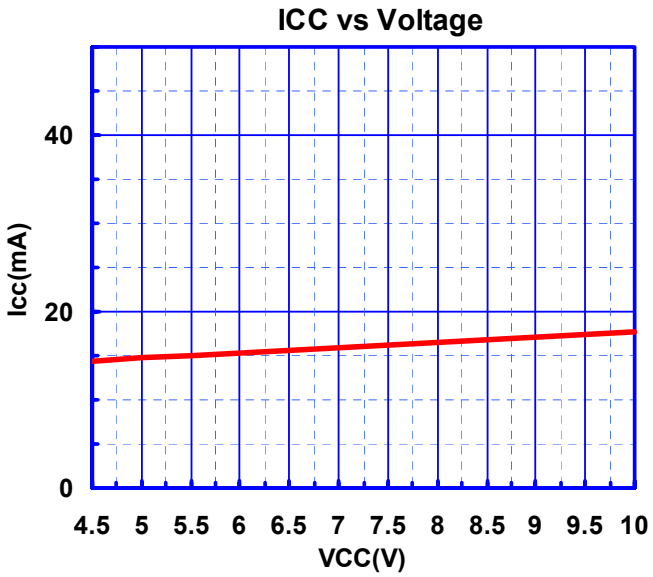
■ **EQUIVALENT CIRCUIT (Vcc=5V)**

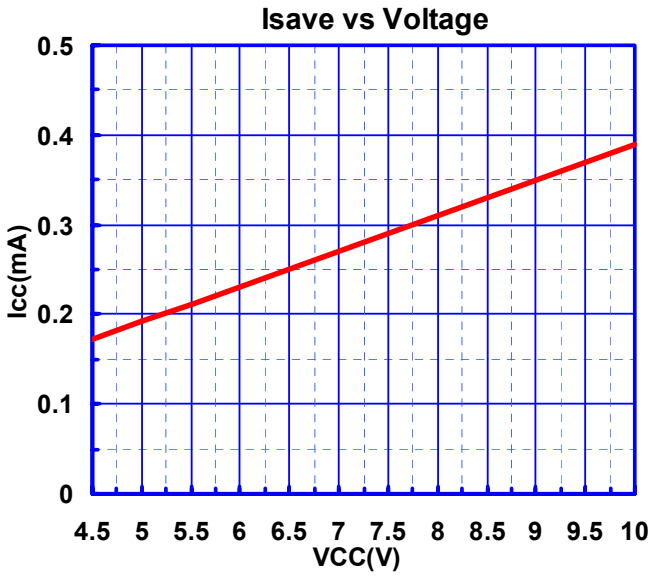
PIN No.	PIN NAME	EQUIVALENT CIRCUIT	DC VOLTAGE
1	Vcc		5V
2	Power Save		-
3	VIN		2.5V
4	GND		-
5	VSAGN		2.5V
6 8	VOUTN VOUTP		2.5V
7	VSAGP		2.5V

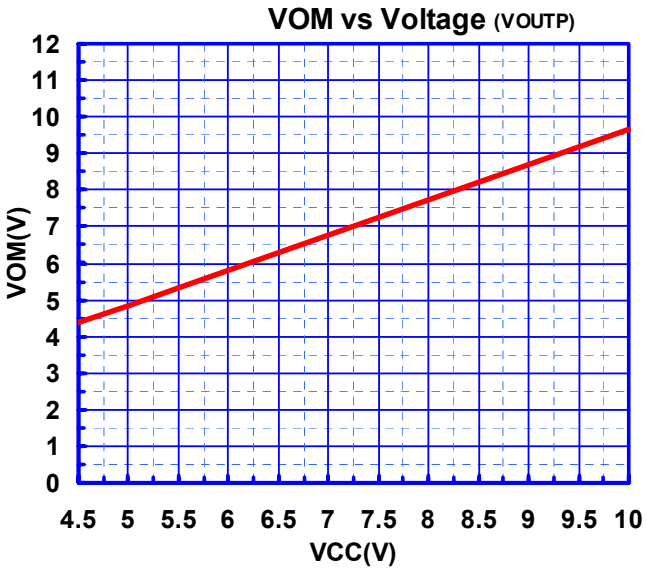
■TYPICAL CHARACTERISTICS

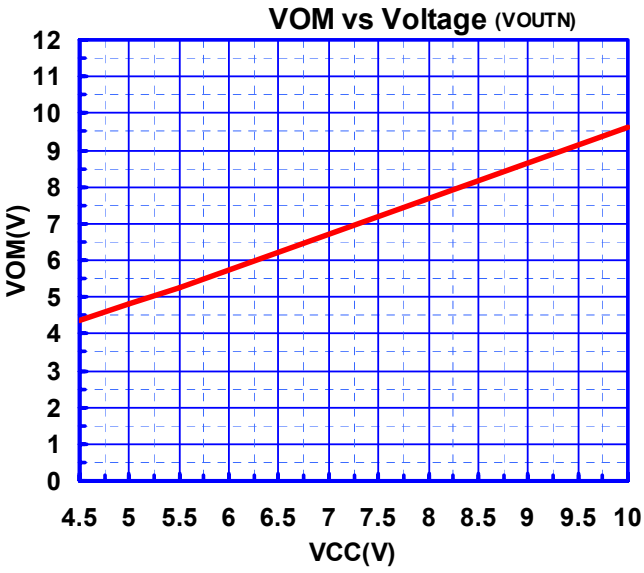




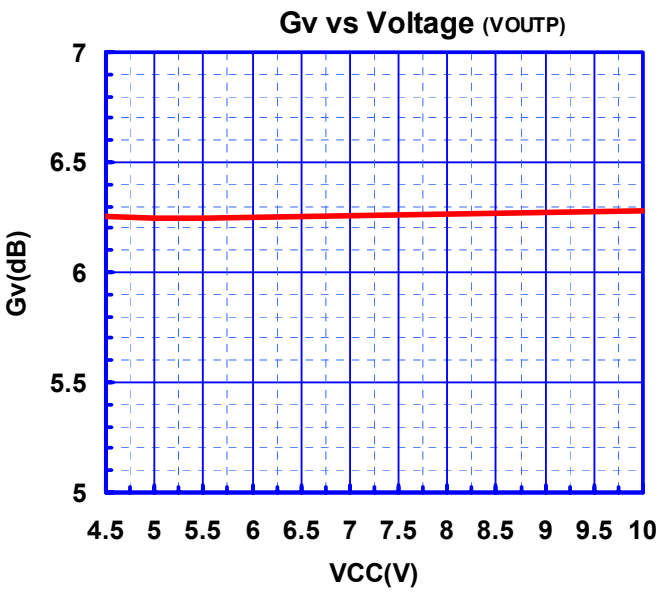


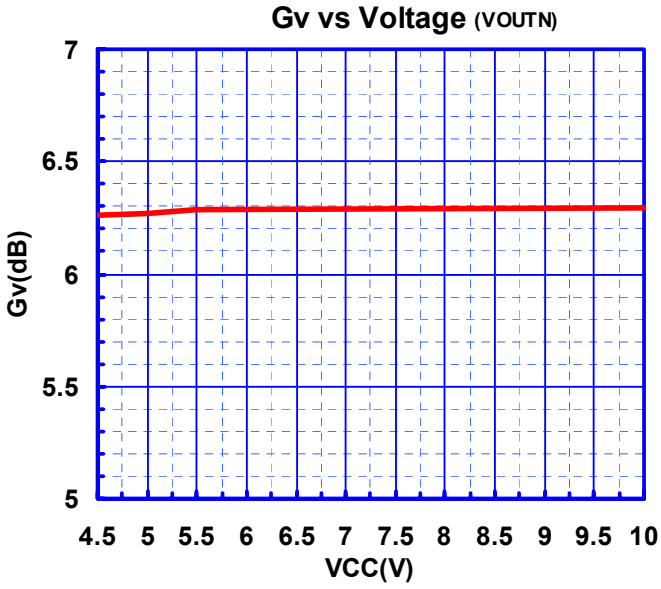


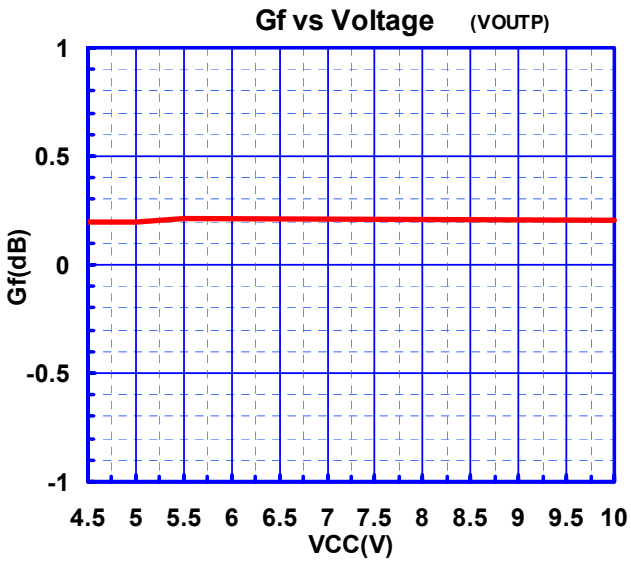


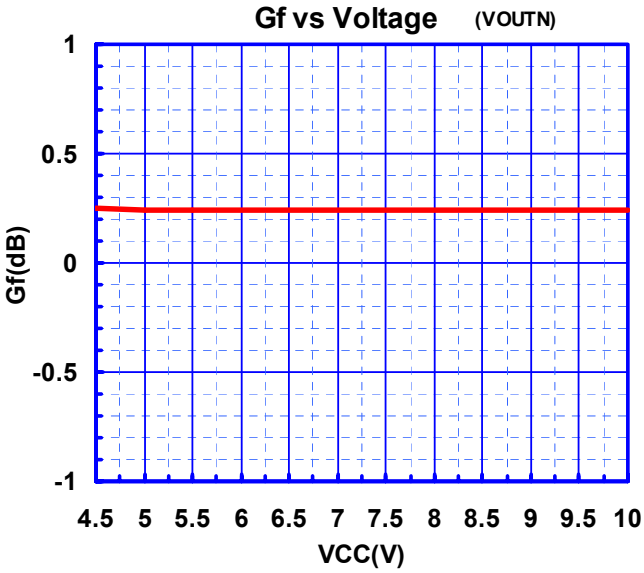


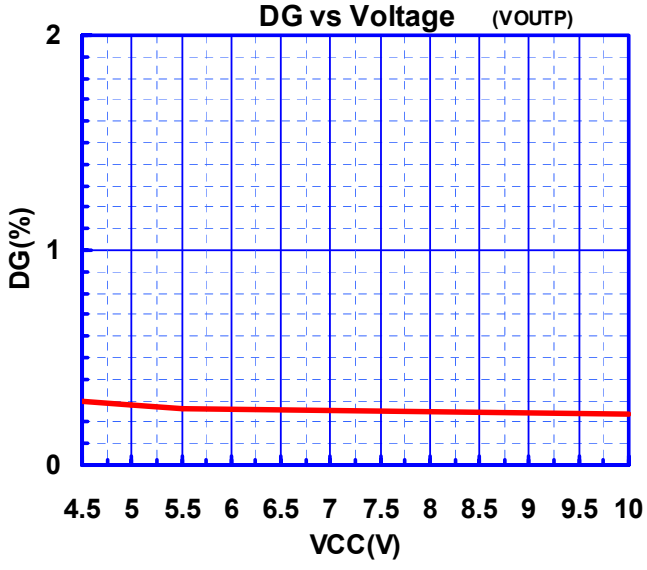
■TYPICAL CHARACTERISTICS

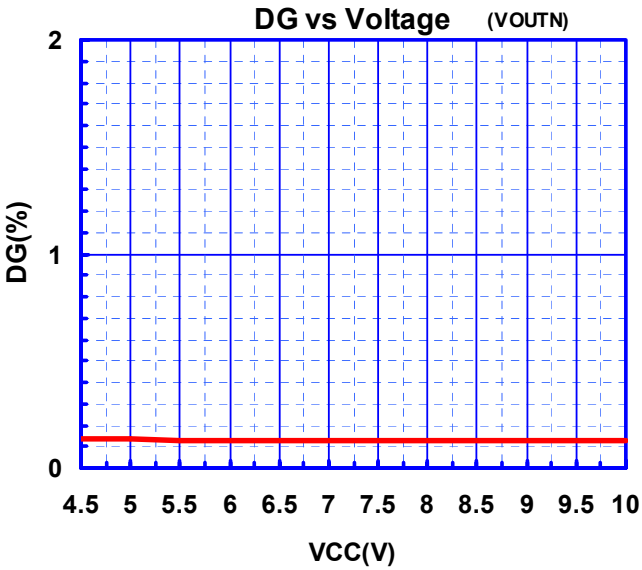












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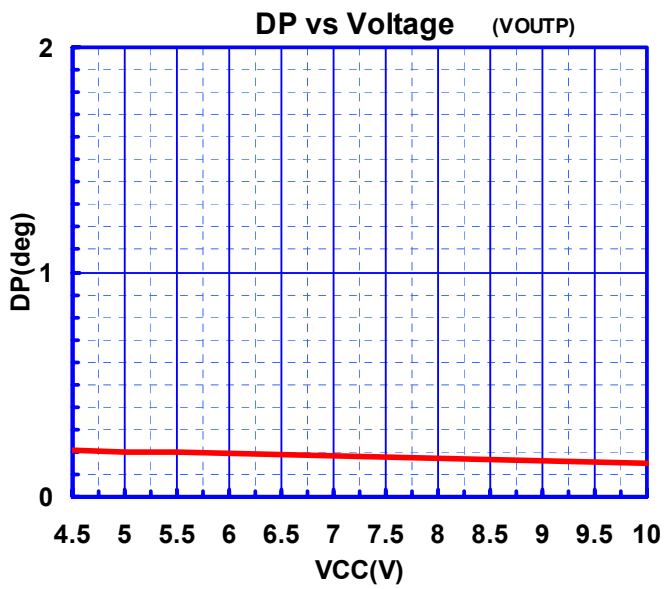
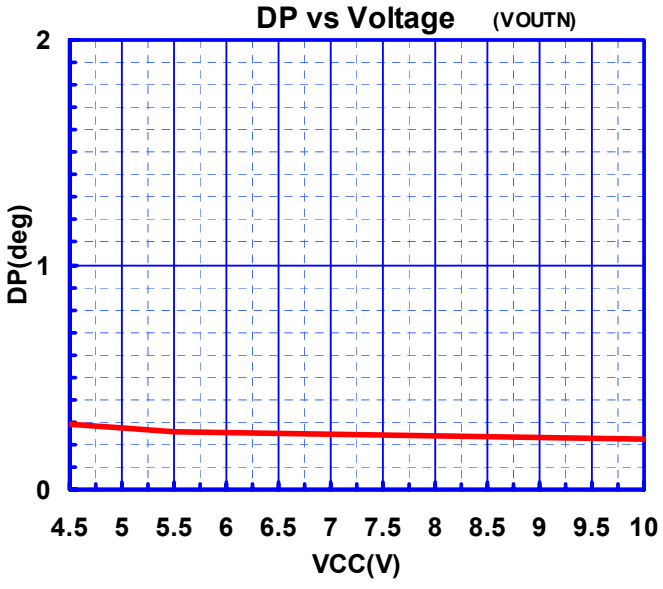
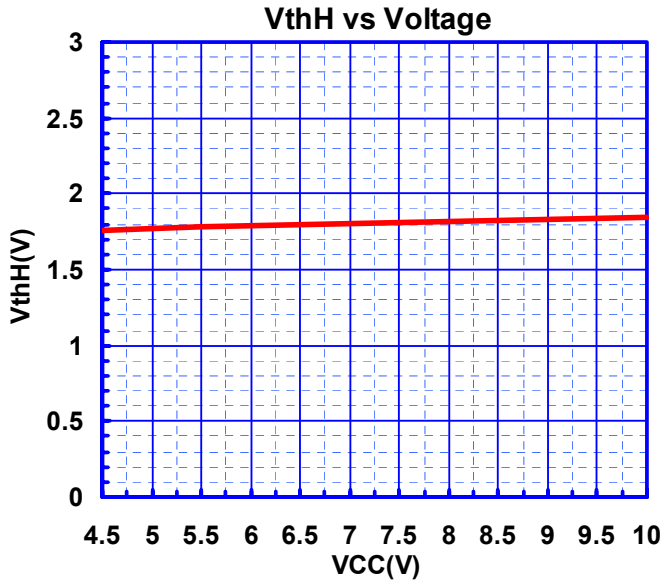
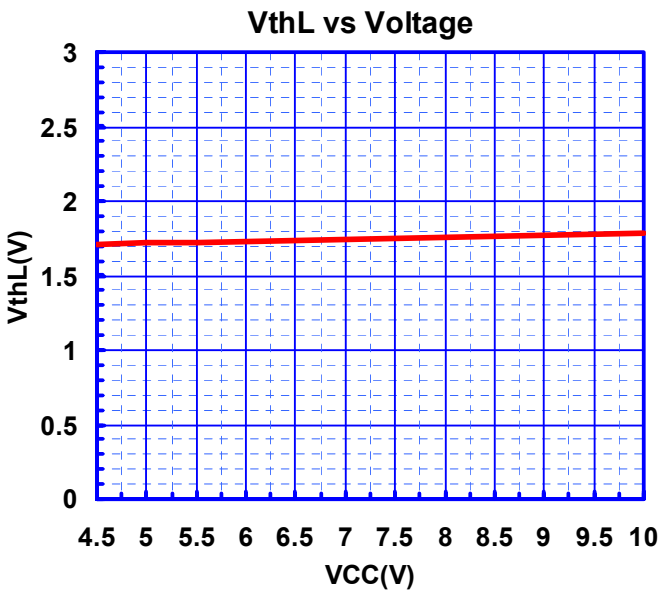
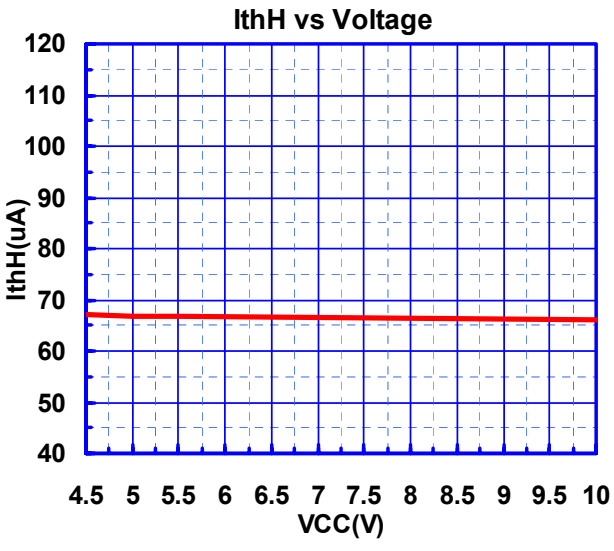
■TYPICAL CHARACTERISTICS

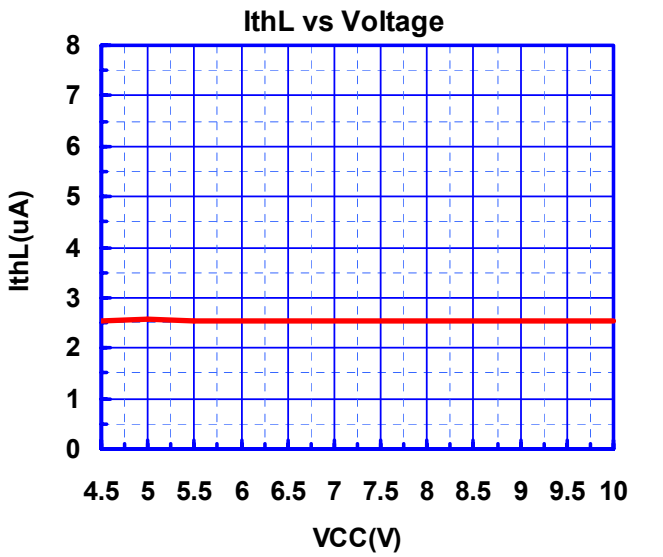












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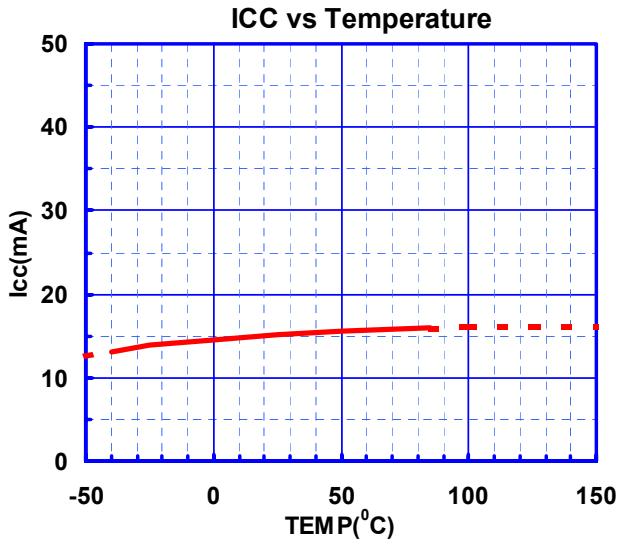

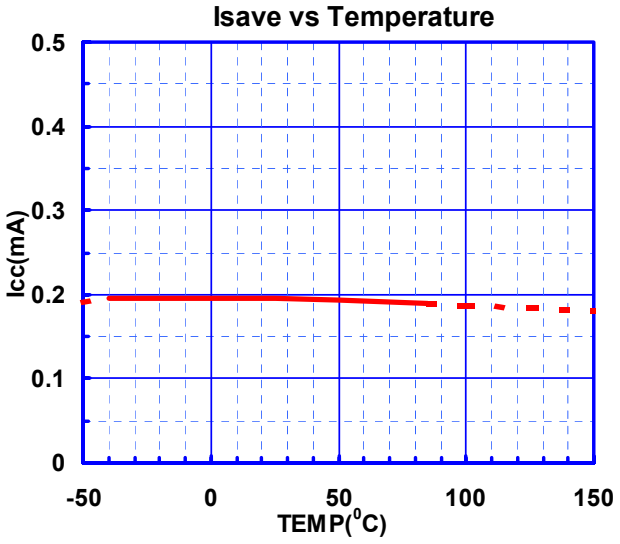

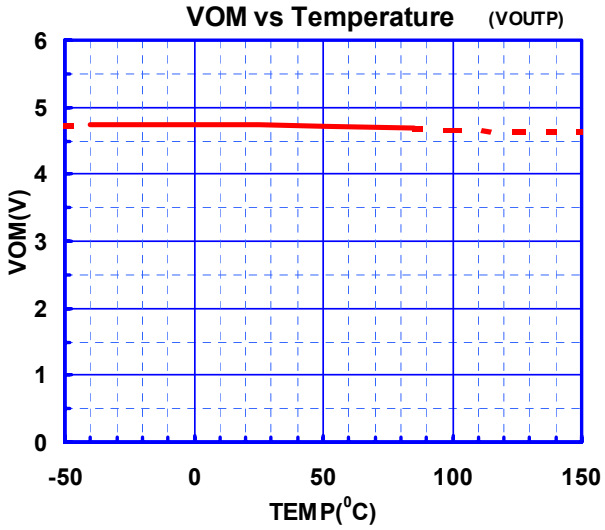

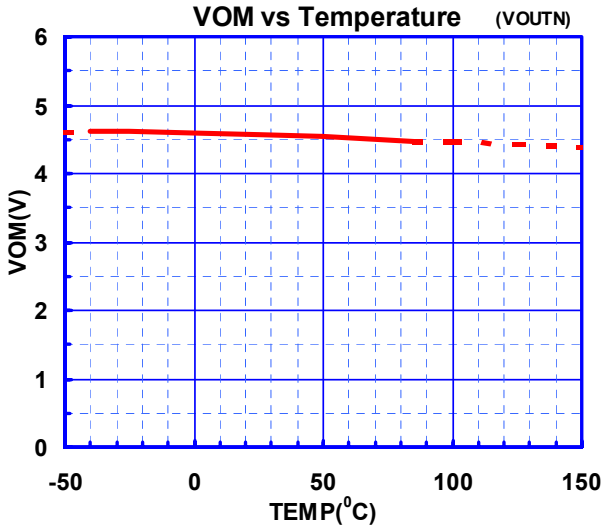

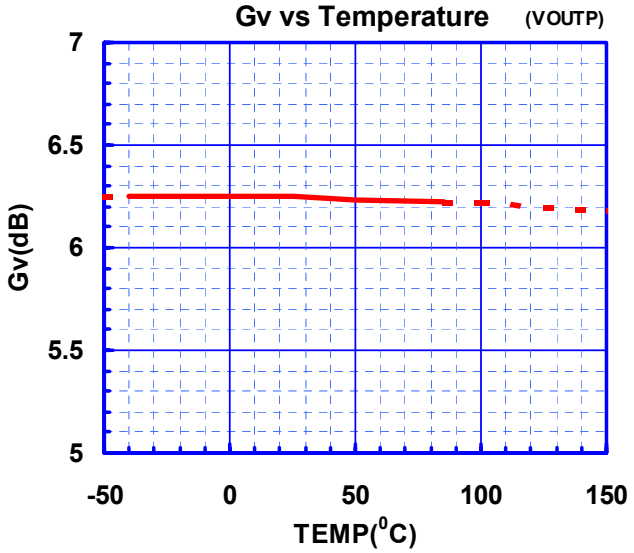

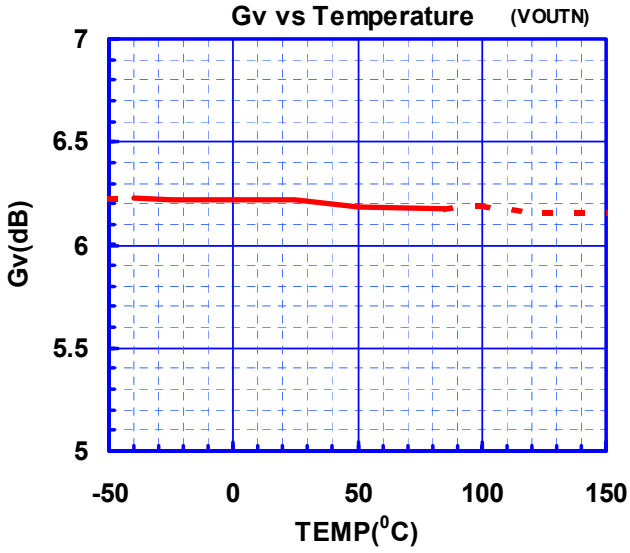

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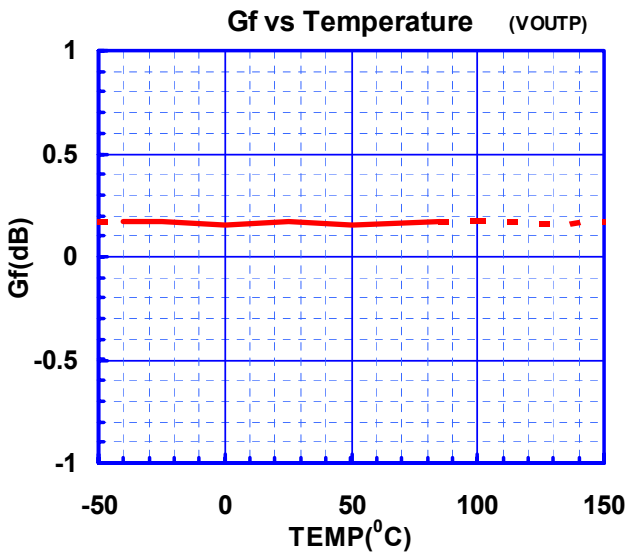
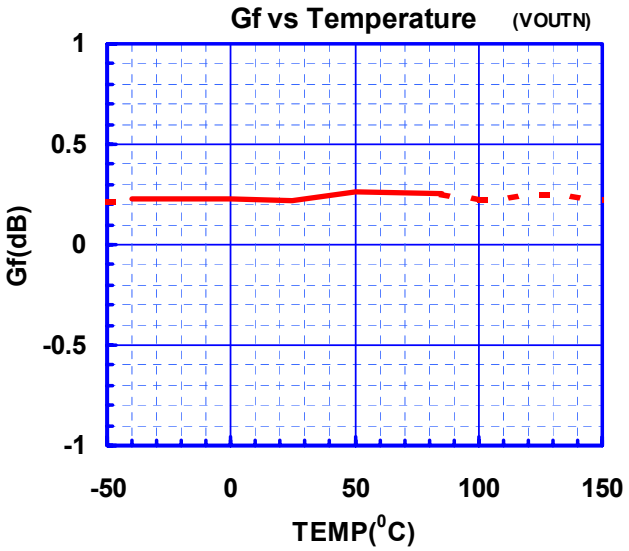
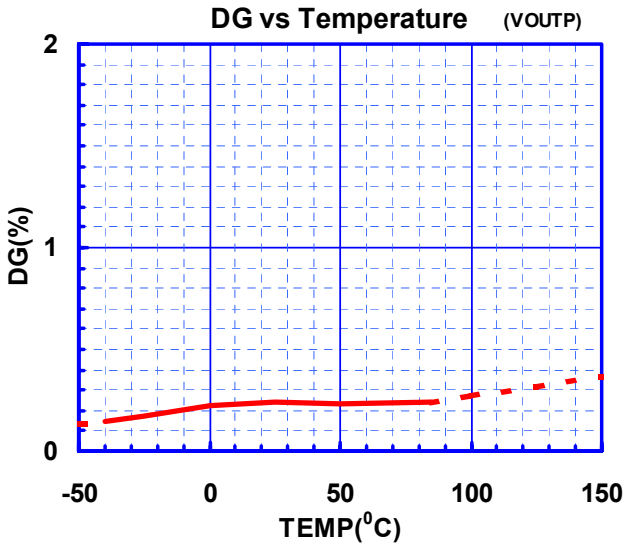
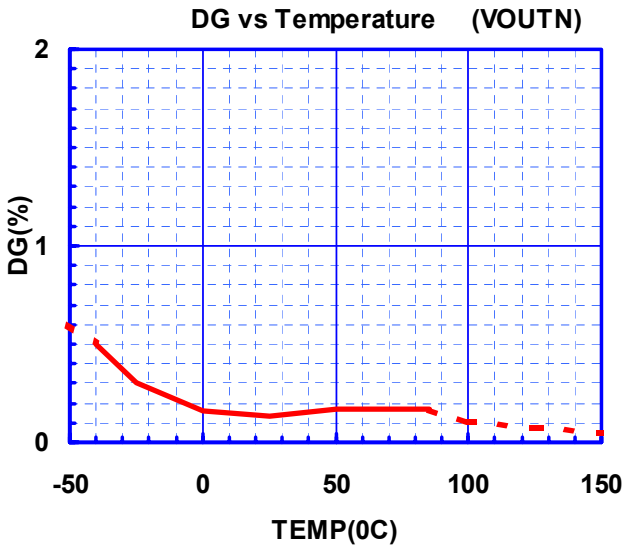
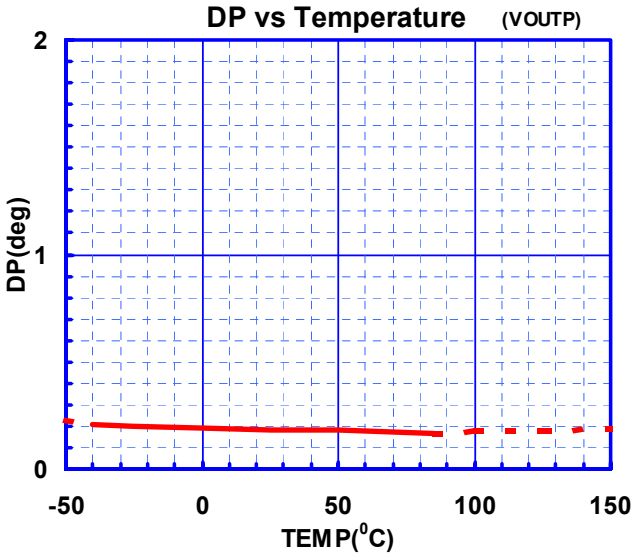
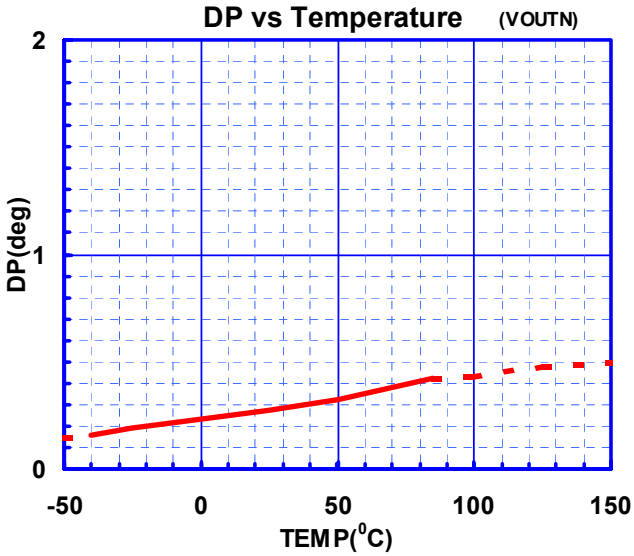




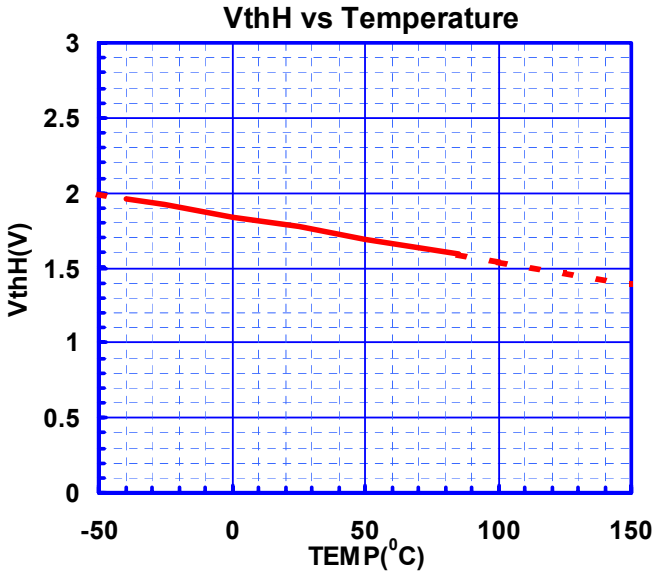


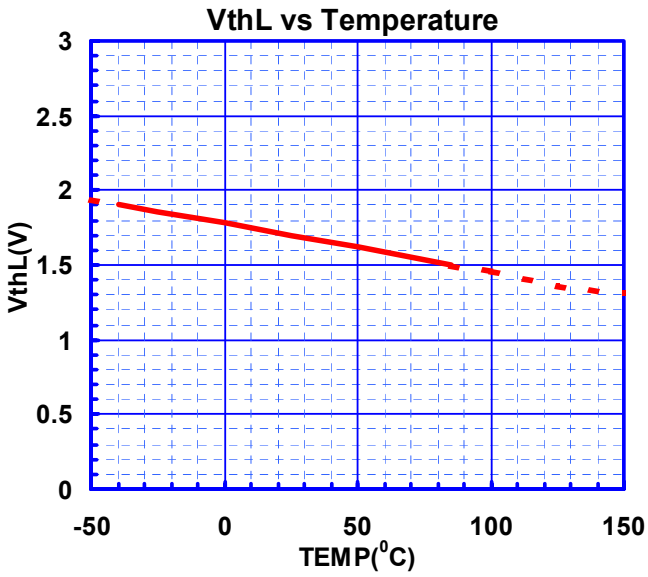


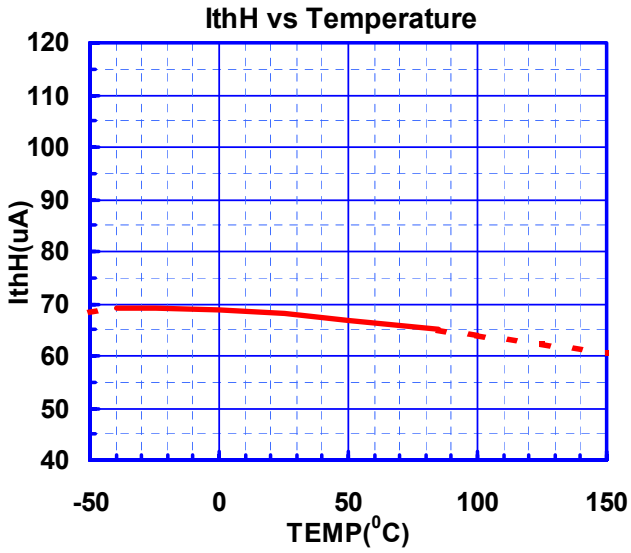


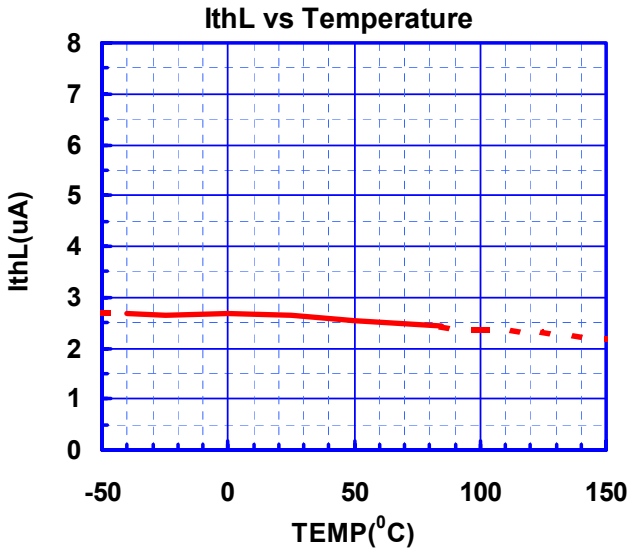


■TYPICAL CHARACTERISTICS









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Данный компонент на территории Российской Федерации

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http://moschip.ru/get-element

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

Офис по работе с юридическими лицами:

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