KA2284
DATASHEET

Specification Revision History:

Version	Date	Description
V1.0	2019/11	New
V1.1	2021/06	Modify Ordering Information
V1.2	2025/02	Modify Ordering Information
V1.3	2025/03	Add application precautions and overall typesetting.

DESCRIPTION

The KA2284 is a monolithic integrated circuit designed for 5dot LED level meter drivers with a built-in rectifying amplifier.It is suitable for AC/DC level meters such as VU meters or signal meters.

FEATURES

High gain rectifying amplifier included(Gv=26dB) Low radiation noise when LED turns on

*logarithmic indicator for 5-dot LED of bar type.

*Constant current output(15mA)

*Wide operating supply voltage(3.5V~11V)

*Not necessary diode or transistor for ALC

*Minimum number of external parts required

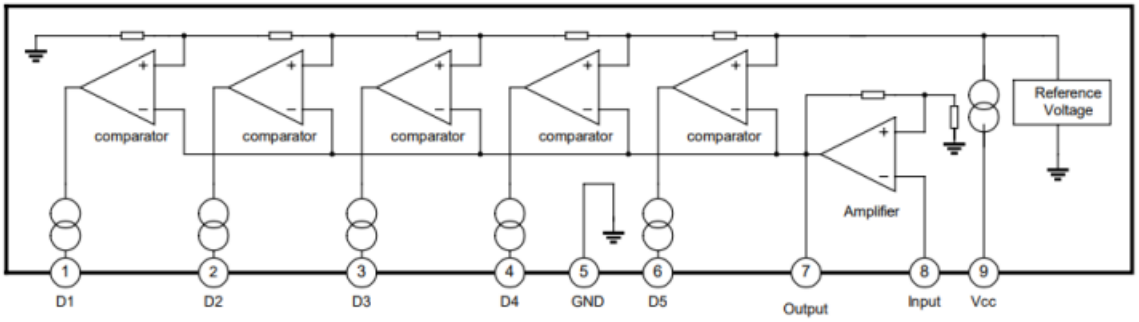
The appearance of the product

SIP9

Ordering Information

Product Model	Package Type	Marking	Packing	Packing Qty
KA2284(GMIC)	SIP9	KA2284 25B0	TUBE	1000PCS/BOX

BLOCK DIAGRAM



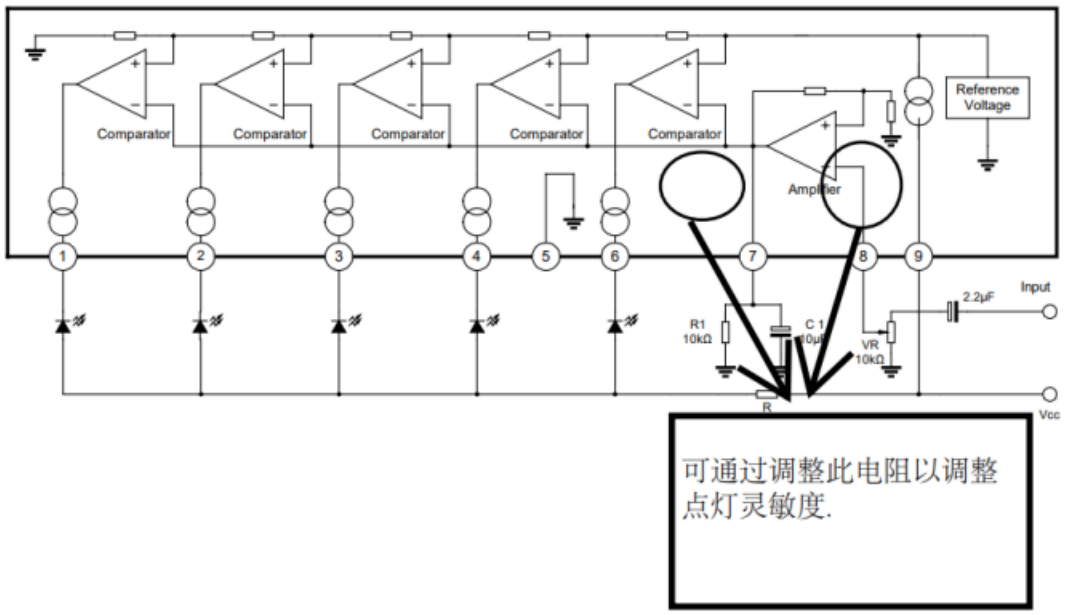
ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

Characteristic	Symbol	Value	Unit
Supply Voltage	Vcc	16	V
Amplifier input Voltage	V8	-0.5V-Vcc	V
Pin 7 Voltage	V7	6	V
D terminal Output Voltage	V_D	16	V
Operating Temperature	Topr	-20 to+80	℃
Storage Temperature	Tstg	-40 to 125	℃
Power dissipation	P_D	1100	W

ELECTRICAL CHARACTERISTICS(Ta=25℃,Ta=25°℃, Vcc=6V, f=1kHZ, unless otherwise specified)

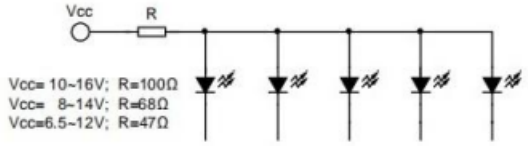
Characteristic	Symbol	Test Condition	Min	Typ.	Max	Unit
Supply Voltage	V_{CC}		3.5	6.0	16.0	V
Supply Current	I_{CC}	V_{IN}=0		5	8	mA
Sensitivity	V_{IN}	In Vc3Level	46	56	66	mV
Comparator ON Level 1	V_{C1}		-11.5	-10.0	-8.5	dB
Comparator ONLevel 2	V_{C2}		-6	-5	-4	dB
Comparator ON Level 3	V_{C3}			0		dB
Comparator ON Level 4	V_{C4}		2.5	3.0	3.5	dB
Comparator ON Level 5	V_{C5}		5	6	7	dB
LED Output current	I_{LED}		11.0	15.0	18.5	mA
Amp Gain	G_V	V_I=0.1V	24	26	28	dB
Input Bias Current	I_{INO}		-1.0	-0.3		μA

TEST CIRCUIT



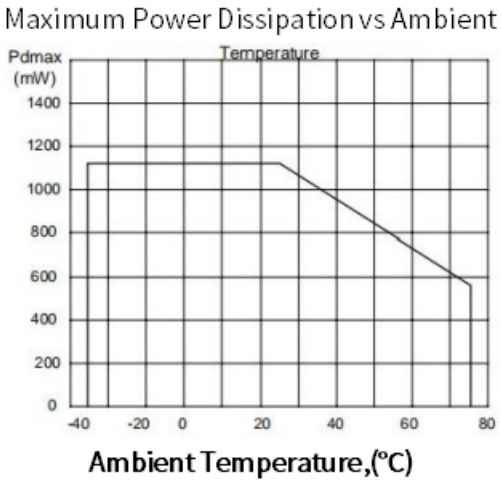
APPLICATION INFORMATION

1.By changing the time constant C1 and,the response,attack and release time,may be varied.In the aboveapplication conditionspower dissipation may be operated at higher levels than the absolute maximum ratings.The wattage of R is to be determined b y the total LED current and R value recommended by the R table.



TO KA2284

TYPICAL PERFORMANCE CHARACTERISTICS



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