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電源管理



顯示驅動



二三極管



LDO穩壓器



觸摸芯片



MOS管



運算放大器



存儲芯片



MCU



串口通信

KA2284-TD

產品規格說明書

KA2284

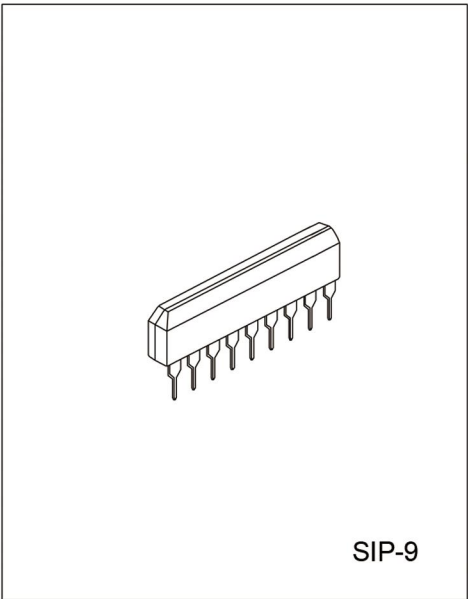
5-DOT DUAL LED LEVEL
METER DRIVER

DESCRIPTION

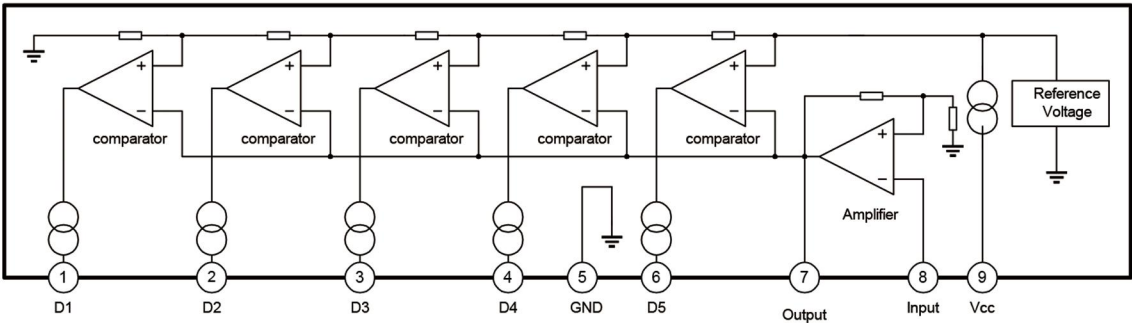
TheKA2284 is a monolithic integrated circuit designed for 5-dot LED level meter drivers with a built-in rectifying amplifier. It is suitable for AC/DC level meters such as VU meters or signal meters.

FEATURES

- *High gain rectifying amplifier included($G_v=26\text{dB}$)
- *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~16V)
- *Not necessary diode or transistor for ALC
- *Minimum number of external parts required



BLOCK DIAGRAM



ABSOLUTE MAXIMUM RATINGS($T_a=25^{\circ}\text{C}$)

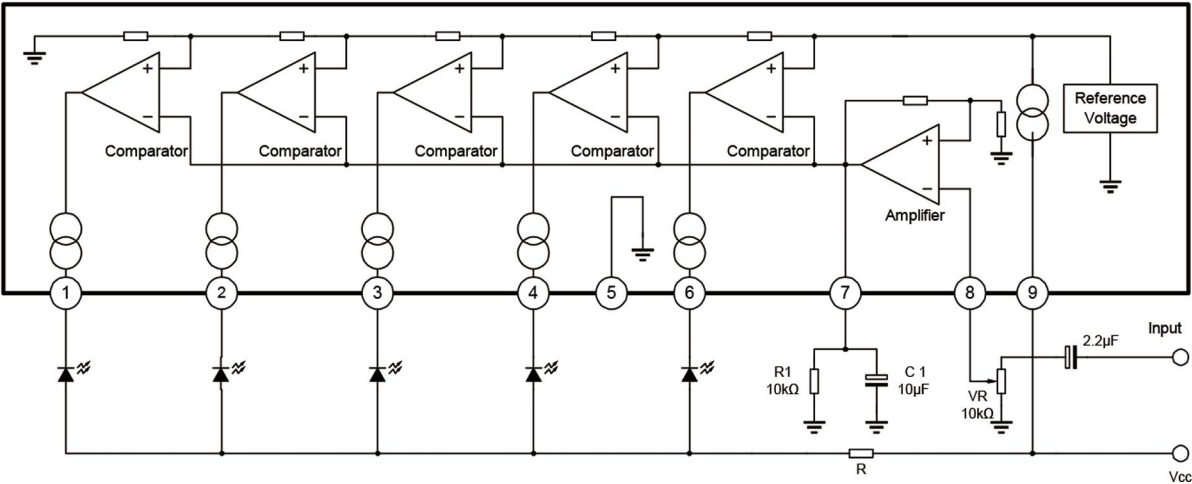
Characteristic	Symbol	Value	Unit
Supply Voltage	Vcc	18	V
Amplifier input Voltage	V8	-0.5V~Vcc	V
Pin 7 Voltage	V7	6	V
D terminal Output Voltage	VD	18	V
Operating Temperature	Topr	-20 to +80	$^{\circ}\text{C}$
Storage Temperature	Tstg	-40 to 125	$^{\circ}\text{C}$
Power dissipation	PD	1100	W

KA2284

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

Characteristic	Symbol	Test Condition	Min	Typ.	Max	Unit
Supply Voltage	Vcc		3.5	6.0	16.0	V
Supply Current	Icc	VIN=0		5	8	mA
Sensitivity	Vin	In Vc3 Level	46	56	66	mV
Comparator ON Level 1	Vc1		-11.5	-10.0	-8.5	dB
Comparator ON Level 2	Vc2		-6	-5	-4	dB
Comparator ON Level 3	Vc3			0		dB
Comparator ON Level 4	Vc4		2.5	3.0	3.5	dB
Comparator ON Level 5	Vc5		5	6	7	dB
LED Output current	ILED		11.0	15.0	18.5	mA
Amp Gain	Gv	Vi=0.1V	24	26	28	dB
Input Bias Current	IINO		-1.0	-0.3		μA

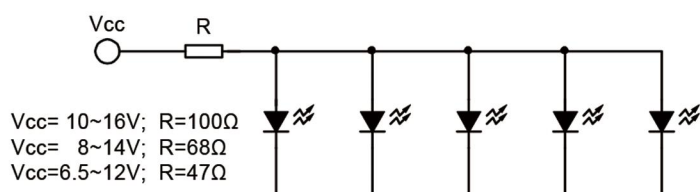
TEST CIRCUIT



KA2284

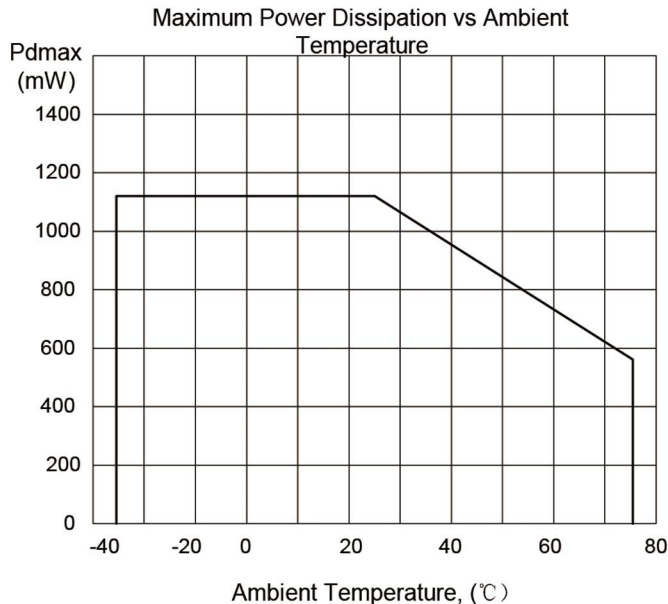
APPLICATION INFORMATION

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



TO KA2284

TYPICAL PERFORMANCE CHARACTERISTICS



KA2284

PACKAGE OUTLINE

SIP-9

UNIT: mm

