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NTE1866
Integrated Circuit
5–Point LED VU Scale Bar Level Meter Driver

Description:

The NTE1866 is a monolithic integrated circuit in a 9–Lead SIP type package designed for use as an LED level meter driver for radio cassette recorders and other audio products.

Features;

- Rectifying amplifiers are used to allow operation by AC or DC input.
- The wide display range covers –13dB to +17dB, enabling the display of even signals with wide dynamic range.
- The drive current for the LEDs is regulated, eliminating LED current variations with supply voltage variations.
- The reference voltage is built in to eliminate output display variations with variations of supply voltage.
- Wide supply voltage range (3.5V to 16V) enables a wide range of applications.

Applications:

- VU meters
- Signal meters
- Other display devices

Absolute Maximum Ratings: (T_A = +25°C unless otherwise specified)

Power Supply Voltage, V_{CC} 18V
Power Dissipation, P_D 800mW
Derate Above 25°C . . . . . 6.4mW/°C
Junction Temperature, T_J . . . . . +150°C
Operating Temperature Range, T_{opr} . . . . . –25° to +70°C
Storage Temperature Range, T_{stg} . . . . . –55° to +125°C

Electrical Characteristics: (T_A = +25°C, V_{CC} = 12V, f = 1kHz unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Power Supply Voltage	V_{CC}		5.5	12.0	16.0	V
Quiescent Current	I_Q		–	7	12	mA
Display Range Range 1	V_{C1}		–16	–13	–9	dB
Range 2	V_{C2}		–9	–7	–4	dB
Range 3	V_{C3}		–	0	–	dB
Range 4	V_{C4}		+7	+10	+12	dB
Range 5	V_{C5}		+13	+17	+19	dB
Input Voltage	V_{IN}		21	47	62	mV_{rms}
LED Current	I_{LED}		11.0	15.0	18.5	mA
Input Current	I_{IN}		–	0.3	1.0	µA

Pin Connection Diagram
(Front View)