

## NTE1181 Integrated Circuit FM Stereo Multiplex Demodulator

**Absolute Maximum Ratings:** ( $T_A = +25^\circ\text{C}$  unless otherwise specified)

Supply Voltage ( $V_{4-11}$ ), $V_{CC}$ .....	12V
Circuit Voltage, $V_{10-11}$ .....	24V
Circuit Current, $I_4$ .....	19mA
Lamp Current, $I_{10}$ .....	100mA
Power Dissipation, $P_D$ .....	340mW
Operating Temperature Range, $T_{opr}$ .....	$-20^\circ$ to $+75^\circ\text{C}$
Storage Temperature Range, $T_{stg}$ .....	$-65^\circ$ to $+150^\circ\text{C}$

**Recommended Operating Conditions:** ( $T_A = +25^\circ\text{C}$  unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Recommended Supply Voltage	$V_{CC}$		4	–	12	V

**Electrical Characteristics:** ( $T_A = +25^\circ\text{C}$ ,  $V_{CC} = 6\text{V}$  unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Total Circuit Current	$I_{tot(off)}$	Lamp OFF	4	6	10	mA
	$I_{tot(on)}$	Lamp ON	5	8	12	mA
Channel Separation	Sep	$V_i = 200\text{mV}$ , $f = 1\text{kHz}$ , MOD, 100%	35	45	–	dB
Channel Balance	CB	$V_i = 200\text{mV}$ , $f = 1\text{kHz}$	–	0.3	1.5	dB
ON Level		$f = 1\text{kHz}$ , MOD, 100%	40	60	75	mV
Voltage Gain	$G_V$	$V_i = 200\text{mV}$ , $f = 1\text{kHz}$	–5.0	–	–0.5	dB

### Pin Connection Diagram

