6.5 Electrical Characteristics, LM741 (1)

PARAMETER		TEST CONDITIONS		MIN	TYP	MAX	UNIT
Input offset voltage		$R_S \le 10\ k\Omega$	$T_A = 25°C$		1	5	mV
			$T_{AMIN} \le T_A \le T_{AMAX}$			6	mV
Input offset voltage adjustment range		$T_A = 25°C$, $V_S = \pm 20$ V			±15		mV
Input offset current		$T_A = 25°C$			20	200	nA
		$T_{AMIN} \le T_A \le T_{AMAX}$			85	500	
Input bias current		$T_A = 25°C$			80	500	nA
		$T_{AMIN} \le T_A \le T_{AMAX}$				1.5	µA
Input resistance		$T_A = 25°C$, $V_S = \pm 20$ V		0.3	2		MΩ
Input voltage range		$T_{AMIN} \le T_A \le T_{AMAX}$		±12	±13		V
Large signal voltage gain		$V_S = \pm 15$ V, $V_O = \pm 10$ V, $R_L \ge 2\ k\Omega$	$T_A = 25°C$	50	200		V/mV
			$T_{AMIN} \le T_A \le T_{AMAX}$	25			
Output voltage swing		$V_S = \pm 15$ V	$R_L \ge 10\ k\Omega$	±12	±14		V
			$R_L \ge 2\ k\Omega$	±10	±13		
Output short circuit current		$T_A = 25°C$			25		mA
Common-mode rejection ratio		$R_S \le 10\ \Omega$, $V_{CM} = \pm 12$ V, $T_{AMIN} \le T_A \le T_{AMAX}$		80	95		dB
Supply voltage rejection ratio		$V_S = \pm 20$ V to $V_S = \pm 5$ V, $R_S \le 10\ \Omega$, $T_{AMIN} \le T_A \le T_{AMAX}$		86	96		dB
Transient response	Rise time	$T_A = 25°C$, unity gain			0.3		µs
	Overshoot				5%		
Slew rate		$T_A = 25°C$, unity gain			0.5		V/µs
Supply current		$T_A = 25°C$			1.7	2.8	mA
Power consumption		$V_S = \pm 15$ V	$T_A = 25°C$		50	85	mW
			$T_A = T_{AMIN}$		60	100	
			$T_A = T_{AMAX}$		45	75	

(1) Unless otherwise specified, these specifications apply for $V_S = \pm 15$ V, $-55°C \le T_A \le +125°C$ (LM741/LM741A). For the LM741C/LM741E, these specifications are limited to $0°C \le T_A \le +70°C$.