

ELECTRICAL CHARACTERISTICS LM78XXC⁽¹⁾ (continued)

0°C ≤ T_J ≤ 125°C unless otherwise noted.

Output Voltage			5V			12V			15V			Units
Input Voltage (unless otherwise noted)			10V			19V			23V			
Symbol	Parameter	Conditions	Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	
V _N	Output Noise Voltage	T _A =25°C, 10 Hz ≤f ≤100 kHz		40			75			90		μV
ΔV _{IN} /ΔV _{OUT}	Ripple Rejection	f = 120 Hz I _O ≤1A, T _j = 25°C or I _O ≤500 mA 0°C ≤T _j ≤+125°C	62	80		55	72		54	70		dB
			62		55		54		dB			
		V _{MIN} ≤V _{IN} ≤V _{MAX}	(8 ≤V _{IN} ≤18)		(15 ≤V _{IN} ≤25)		(18.5 ≤V _{IN} ≤28.5)		V			
R _O	Dropout Voltage	T _j = 25°C, I _{OUT} = 1A		2.0			2.0			2.0		V
	Output Resistance	f = 1 kHz		8			18			19		mΩ
	Short-Circuit Current	T _j = 25°C		2.1			1.5			1.2		A
	Peak Output Current	T _j = 25°C		2.4			2.4			2.4		A
	Average TC of V _{OUT}	0°C ≤T _j ≤+125°C, I _O = 5 mA		0.6			1.5			1.8		mV/°C
V _{IN}	Input Voltage Required to Maintain Line Regulation	T _j = 25°C, I _O ≤1A		7.5		14.6			17.7			V