ELECTRICAL CHARACTERISTICS LM78XXC[1]

0℃ ≤T_J ≤125℃ 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_O	Output Voltage	Tj = 25℃, 5 mA ≤I_O ≤1A		4.8	5	5.2	11.5	12	12.5	14.4	15	15.6	V
		P_D ≤15W, 5 mA ≤I_O ≤1A		4.75		5.25	11.4		12.6	14.2		15.7	V
		V_{MIN} ≤V_{IN} ≤V_{MAX}		(7.5 ≤V_{IN} ≤20)			(14.5 ≤V_{IN} ≤27)			5 (17.5 ≤V_{IN} ≤30)		5	V
ΔV_O	Line Regulation	I_O = 500 mA	Tj = 25℃		3	50		4	120		4	150	mV
			ΔV_{IN}	(7 ≤V_{IN} ≤25)			14.5 ≤V_{IN} ≤30)			(17.5 ≤V_{IN} ≤30)			V
			0℃ ≤Tj ≤+125℃			50			120			150	mV
			ΔV_{IN}	(8 ≤V_{IN} ≤20)			(15 ≤V_{IN} ≤27)			(18.5 ≤V_{IN} ≤30)			V
		I_O ≤1A	Tj = 25℃			50			120			150	mV
			ΔV_{IN}	(7.5 ≤V_{IN} ≤20)			(14.6 ≤V_{IN} ≤27)			(17.7 ≤V_{IN} ≤30)			V
			0℃ ≤Tj ≤+125℃			25			60			75	mV
			ΔV_{IN}	(8 ≤V_{IN} ≤12)			(16 ≤V_{IN} ≤22)			(20 ≤V_{IN} ≤26)			V
ΔV_O	Load Regulation	Tj = 25℃	5 mA ≤I_O ≤1.5A		10	50		12	120		12	150	mV
			250 mA ≤I_O ≤750 mA			25			60			75	mV
		5 mA ≤I_O ≤1A, 0℃ ≤Tj ≤ +125℃				50			120			150	mV
I_Q	Quiescent Current	I_O ≤1A	Tj = 25℃			8			8			8	mA
			0℃ ≤Tj ≤+125℃			8.5			8.5			8.5	mA