

NSP-78L

NSP-78LXX

100mA
IC
SOT-89
5%
100mA

NSP-78LXX

HIFI

5.0V, 6.0V, 7V, 8.0V, 9.0V, 10V, 12V, 15V

(Ta=25)

NSP-78L05

Unless otherwise specified, $V_{in}=10V$, $I_{out}=40mA$, $C_{in}=0.33\mu F$, $C_{out}=0.1\mu F$, $T_j=0$ to 125

CHARACTERISTIC	SYMBOL	TEST CONDITION		MIN.	TYP.	MAX.	UNIT
Output Voltage	V_{out}	T _j =25		4.75	5.0	5.25	V
Input Regulation	Reg line	T _j =25	7.0V V_{in} 20V	-	55	150	mV
			8.0V V_{in} 20V	-	45	100	
Load Regulation	Reg load	T _j =25	1.0mA I_{out} 100mA	-	11	60	mV
			1.0mA I_{out} 40mA	-	5.0	30	
Output Voltage	V_{out}	7.0V V_{in} 20V 1.0mA I_{out} 40mA		4.65	-	5.3	V
		$V_{in}=10V$, 1.0mA I_{out} 70mA		4.65	-	5.3	
Quiescent Current	I_Q	T _j =25		-	3.1	6.0	mA
		T _j =125		-	-	5.5	
Quiescent Current	I_Q	8.0V V_{in} 20V		-	-	1.5	mA
Change		1.0mA I_{out} 40mA		-	-	0.1	
Output Noise Voltage	V_{NO}	T _a =25, 10Hz f 100kHz		-	40	-	μV_{rms}
Long Term Stability	V_{out}/t			-	12	-	mV/1.0kHrs
Ripple Rejection Ratio	RR	f=120Hz, 8.0V V_{in} 18V, T _j =25		41	49	-	dB
Dropout Voltage	$V_{in}-V_{out}$	T _j =25			1.7		V
Average Temperature Coefficient of Output Voltage	TC _{vo}	$I_{out}=5mA$		-	-0.6	-	mV/

NSP-78L06

less otherwise specified, $V_{in}=11V$, $I_{out}=40mA$, $C_{in}=0.33\mu F$, $C_{out}=0.1\mu F$, $T_j=0$ to 125

CHARACTERISTIC	SYMBOL	TEST CONDITION		MIN.	TYP.	MAX.	UNIT
Output Voltage	V_{out}	T _j =25		5.7	6.0	6.3	V
Input Regulation	Reg line	T _j =25	8.1V V_{in} 21V	-	50	150	mV
			9.0V V_{in} 21V,	-	45	110	
Load Regulation	Reg load	T _j =25	1.0mA I_{out} 100mA	-	12	70	mV
			1.0mA I_{out} 40mA	-	5.5	35	
Output Voltage	V_{out}	8.1V V_{in} 21V 1.0mA I_{out} 40mA		5.58	-	6.42	V
		$V_{in}=11V$, 1.0mA I_{out} 70mA		5.58	-	6.42	
Quiescent Current	I_Q	T _j =25		-	3.1	6.0	mA
		T _j =125		-	-	5.5	
Quiescent Current	I_Q	9.0V V_{in} 19V,		-	-	1.5	mA
Change		1.0mA I_{out} 40mA		-	-	0.1	
Output Noise Voltage	V_{NO}	T _a =25, 10Hz f 100kHz		-	40	-	μV_{rms}
Long Term Stability	V_{out}/t			-	14	-	mV/1.0kHrs
Ripple Rejection Ratio	RR	F=120Hz, 9.0V V_{in} 19V, T _j =25		39	47	-	dB
Dropout Voltage	$V_{in}-V_{out}$	T _j =25			1.7		V
Average Temperature Coefficient of Output Voltage	TC _{vo}	$I_{out}=5mA$		-	-0.7	-	mV/

