



Three-Terminal Fixed Positive Voltage Regulators

SiP7805BA	SiP7808BA	SiP7810BA	SiP7815BA	SiP7824BA
SiP7806BA	SiP7809BA	SiP7812BA	SiP7818BA	

FEATURES

- Output Current In Excess Of 1.0 A
- No External Components Required
- Internal Thermal Overload Protection
- Internal Short-Circuit Current Limiting
- Output Transistor Safe-Area Compensation
- Output Voltage Offered In 2% Tolerance

MECHANICAL DATA

Case: TO-220AB

DESCRIPTION

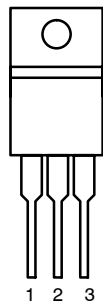
These voltage regulators are monolithic integrated circuits designed as fixed-voltage regulators for a wide variety of applications including local, on-card regulation. These regulators employ internal current limiting, thermal shutdown, and safe-area protection. With adequate heatsinking the

SiP78xxBA can deliver output currents in excess of 1.5 A.

Although designed primarily as a fixed voltage regulator, these devices can be used with external components to obtain adjustable voltages with currents.

PACKAGING AND PIN DEFINITION

TO-220AB



Top View

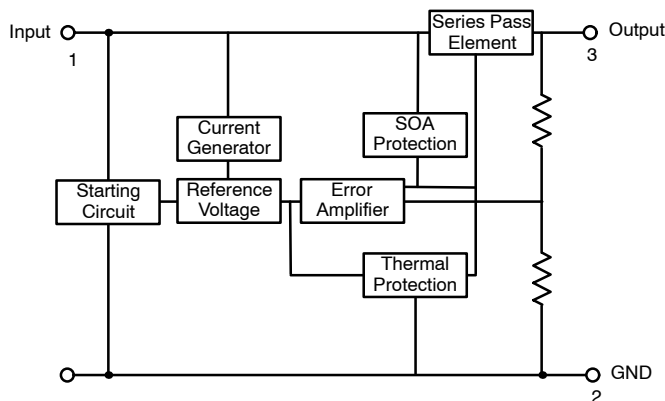
Order Number:
SiP78xxBA

Pin Definition

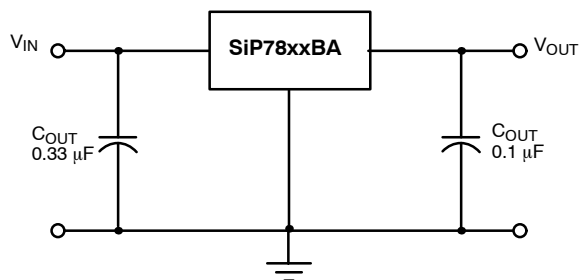
- 1.. V_{IN}
2. GND
3. V_{OUT}

(Heatsink/tab connected to pin 2)

INTERNAL BLOCK DIAGRAM



STANDARD APPLICATION



NOTE:

- c. A common ground is required between the input and the output voltages.
- d. The input voltage must remain typically 2.0 V above the output voltage even during the low point on the input ripple voltage.
- e. xx = these two digits of the part number indicate output voltage.
- f. C_{IN} is required if regulator is located an appreciable distance from the power supply filter.
- g. C_{OUT} is not needed for stability, however it does improve transient response.

ABSOLUTE MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$ UNLESS OTHERWISE NOTED)

Parameter	Symbol	Limit	Unit
Input Voltage	V_{IN}	30 ^a	V
		40 ^b	
Operating Temperature Range	T_A	-20 to 85	°C
Storage Temperature Range	T_{stg}	-65 to 150	

Notes

- a. SiP7805BA through SiP7818BA
- b. SiP7824BA only

THERMAL RESISTANCE RATINGS

Parameter	Symbol	Limit	Unit
Junction-to-Case	R_{thJC}	5	°C/W

SPECIFICATIONS

SiP7805BA

Parameter	Symbol	Test Conditions Unless Specified $V_{IN} = 10\text{ V}$, $I_{OUT} = 500\text{ mA}$, $C_{IN} = 0.33\ \mu\text{F}$, $C_{OUT} = 0.1\ \mu\text{F}$ $0^\circ\text{C} \leq T_J \leq 125^\circ\text{C}$	Limits			Unit
			Min	Typ	Max	
Output Voltage	V_{OUT}	$T_J = 25^\circ\text{C}$	4.90	5.0	5.10	V
		$7.0\text{ V} \leq V_{IN} \leq 20\text{ V}$, $5\text{ mA} \leq I_{OUT} \leq 1.0\text{ A}$, $P_D \leq 15\text{ W}$	4.85		5.15	
Line Regulation	ΔREG_{line}	$T_J = 25^\circ\text{C}$	$7.0\text{ V} \leq V_{IN} < 25\text{ V}$	3	100	mV
Load Regulation	ΔREG_{load}		$8.0\text{ V} \leq V_{IN} < 13\text{ V}$	1	50	
			$10\text{ mA} \leq I_{OUT} < 1.5\text{ A}$	15	100	
Quiescent Current	I_Q	$I_{OUT} = 0$, $T_J = 25^\circ\text{C}$		4.2	8	mA
		$7.0\text{ V} \leq V_{IN} \leq 25\text{ V}$			1.3	
Quiescent Current Change	ΔI_Q	$5\text{ mA} \leq I_{OUT} \leq 1.0\text{ A}$			0.5	
Output Noise Voltage	V_N	$10\text{ Hz} \leq f \leq 100\text{ kHz}$, $T_J = 25^\circ\text{C}$		40		μV
Ripple Rejection	RR	$f = 120\text{ Hz}$	62	78		dB
Dropout Voltage	V_{DROD}	$I_{OUT} = 1.0\text{ A}$, $T_J = 25^\circ\text{C}$		2		V
Output Resistance	R_{OUT}	$f = 1\text{ kHz}$		17		$\text{m}\Omega$
Output Short Circuit	I_{OS}	$T_J = 25^\circ\text{C}$		750		mA
Peak Output	$I_{OUT(peak)}$			1.5		A
Temperature Coefficient	$\Delta V_{OUT}/\Delta T_J$	$I_{OUT} = 5\text{ mA}$, $0^\circ\text{C} \leq T_J \leq 125^\circ\text{C}$		-1.1		$\text{mV}/^\circ\text{C}$



SPECIFICATIONS		SiP7806BA					
Parameter	Symbol	Test Conditions Unless Specified $V_{IN} = 11\text{ V}$, $I_{OUT} = 500\text{ mA}$, $C_{IN} = 0.33\text{ }\mu\text{F}$, $C_{OUT} = 0.1\text{ }\mu\text{F}$ $0^\circ\text{C} \leq T_J \leq 125^\circ\text{C}$	Limits			Unit	
			Min	Typ	Max		
Output Voltage	V_{OUT}	$T_J = 25^\circ\text{C}$	5.88	6.0	6.12	V	
		$8.0\text{ V} \leq V_{IN} \leq 21\text{ V}$, $5\text{ mA} \leq I_{OUT} \leq 1.0\text{ A}$, $P_D \leq 15\text{ W}$	5.38		6.17		
Line Regulation	ΔREG_{line}	$T_J = 25^\circ\text{C}$		5	120	mV	
					1.5		60
Load Regulation	ΔREG_{load}				14		120
					4		60
Quiescent Current	I_Q	$I_{OUT} = 0$, $T_J = 25^\circ\text{C}$		4.3	8.0	mA	
Quiescent Current Change	ΔI_Q	$8.0\text{ V} \leq V_{IN} \leq 25\text{ V}$			1.3		
		$5\text{ mA} \leq I_{OUT} \leq 1.0\text{ A}$			0.5		
Output Noise Voltage	V_N	$10\text{ Hz} \leq f \leq 100\text{ kHz}$, $T_J = 25^\circ\text{C}$		45		μV	
Ripple Rejection	RR	$f = 120\text{ Hz}$, $9\text{ V} \leq V_{IN} \leq 19\text{ V}$	59	75		dB	
Dropout Voltage	V_{DROP}	$I_{OUT} = 1.0\text{ A}$, $T_J = 25^\circ\text{C}$		2		V	
Output Resistance	R_{OUT}	$f = 1\text{ kHz}$		19		$\text{m}\Omega$	
Output Short Circuit	I_{OS}	$T_J = 25^\circ\text{C}$		550		mA	
Peak Output	$I_{OUT(peak)}$				1.5		A
Temperature Coefficient	$\Delta V_{OUT}/\Delta T_J$		$I_{OUT} = 5\text{ mA}$, $0^\circ\text{C} \leq T_J \leq 125^\circ\text{C}$		-0.8		$\text{mV}/^\circ\text{C}$

SPECIFICATIONS		SiP7808BA					
Parameter	Symbol	Test Conditions Unless Specified $V_{IN} = 14\text{ V}$, $I_{OUT} = 500\text{ mA}$, $C_{IN} = 0.33\text{ }\mu\text{F}$, $C_{OUT} = 0.1\text{ }\mu\text{F}$ $0^\circ\text{C} \leq T_J \leq 125^\circ\text{C}$	Limits			Unit	
			Min	Typ	Max		
Output Voltage	V_{OUT}	$T_J = 25^\circ\text{C}$	7.84	8.0	8.16	V	
		$10.5\text{ V} \leq V_{IN} \leq 23\text{ V}$, $5\text{ mA} \leq I_{OUT} \leq 1.0\text{ A}$, $P_D \leq 15\text{ W}$	7.74		8.26		
Line Regulation	ΔREG_{line}	$T_J = 25^\circ\text{C}$		6	160	mV	
					2		80
Load Regulation	ΔREG_{load}				12		160
					4		80
Quiescent Current	I_Q	$I_{OUT} = 0$, $T_J = 25^\circ\text{C}$		4	8.0	mA	
Quiescent Current Change	ΔI_Q	$10.5\text{ V} \leq V_{IN} \leq 25\text{ V}$			1		
		$5\text{ mA} \leq I_{OUT} \leq 1.0\text{ A}$			0.5		
Output Noise Voltage	V_N	$10\text{ Hz} \leq f \leq 100\text{ kHz}$, $T_J = 25^\circ\text{C}$		52		μV	
Ripple Rejection	RR	$f = 120\text{ Hz}$	56	72		dB	
Dropout Voltage	V_{DROP}	$I_{OUT} = 1.0\text{ A}$, $T_J = 25^\circ\text{C}$		2		V	
Output Resistance	R_{OUT}	$f = 1\text{ kHz}$		16		$\text{m}\Omega$	
Output Short Circuit	I_{OS}	$T_J = 25^\circ\text{C}$		450		mA	
Peak Output	$I_{OUT(peak)}$				1.5		A
Temperature Coefficient	$\Delta V_{OUT}/\Delta T_J$		$I_{OUT} = 5\text{ mA}$, $0^\circ\text{C} \leq T_J \leq 125^\circ\text{C}$		-0.8		$\text{mV}/^\circ\text{C}$

SPECIFICATIONS		SiP7809BA				
Parameter	Symbol	Test Conditions Unless Specified $V_{IN} = 15\text{ V}$, $I_{OUT} = 500\text{ mA}$, $C_{IN} = 0.33\text{ }\mu\text{F}$, $C_{OUT} = 0.1\text{ }\mu\text{F}$ $0^\circ\text{C} \leq T_J \leq 125^\circ\text{C}$	Limits			Unit
			Min	Typ	Max	
Output Voltage	V_{OUT}	$T_J = 25^\circ\text{C}$	8.82	9	9.18	V
		$11.5\text{ V} \leq V_{IN} \leq 24\text{ V}$, $5\text{ mA} \leq I_{OUT} \leq 1.0\text{ A}$, $P_D \leq 15\text{ W}$	8.77		9.23	
Line Regulation	$\Delta\text{REG}_{\text{line}}$	$T_J = 25^\circ\text{C}$	$11.5\text{ V} \leq V_{IN} < 27\text{ V}$	6	160	mV
Load Regulation	$\Delta\text{REG}_{\text{load}}$		$12.0\text{ V} \leq V_{IN} < 16\text{ V}$	2	80	
			$5\text{ mA} \leq I_{OUT} < 1.5\text{ A}$	12	160	
			$250\text{ mA} \leq I_{OUT} < 750\text{ mA}$	4	80	
Quiescent Current	I_Q	$I_{OUT} = 0$, $T_J = 25^\circ\text{C}$		4.3	8	mA
Quiescent Current Change	ΔI_Q	$11.5\text{ V} \leq V_{IN} \leq 27\text{ V}$			1	
		$5\text{ mA} \leq I_{OUT} \leq 1.0\text{ A}$			0.5	
Output Noise Voltage	V_N	$10\text{ Hz} \leq f \leq 100\text{ kHz}$, $T_J = 25^\circ\text{C}$		52		μV
Ripple Rejection	RR	$f = 120\text{ Hz}$, $12\text{ V} \leq V_{IN} \leq 22\text{ V}$	55	72		dB
Dropout Voltage	V_{DROD}	$I_{OUT} = 1.0\text{ A}$, $T_J = 25^\circ\text{C}$		2		V
Output Resistance	R_{OUT}	$f = 1\text{ kHz}$		16		$\text{m}\Omega$
Output Short Circuit	I_{OS}	$T_J = 25^\circ\text{C}$		450		mA
Peak Output	$I_{OUT(\text{peak})}$			1.5		A
Temperature Coefficient	$\Delta V_{OUT}/\Delta T_J$	$I_{OUT} = 5\text{ mA}$, $0^\circ\text{C} \leq T_J \leq 125^\circ\text{C}$		-1		$\text{mV}/^\circ\text{C}$

SPECIFICATIONS		SiP7810BA				
Parameter	Symbol	Test Conditions Unless Specified $V_{IN} = 16\text{ V}$, $I_{OUT} = 500\text{ mA}$, $C_{IN} = 0.33\text{ }\mu\text{F}$, $C_{OUT} = 0.1\text{ }\mu\text{F}$ $0^\circ\text{C} \leq T_J \leq 125^\circ\text{C}$	Limits			Unit
			Min	Typ	Max	
Output Voltage	V_{OUT}	$T_J = 25^\circ\text{C}$	9.8	10	10.2	V
		$12.5\text{ V} \leq V_{IN} \leq 25\text{ V}$, $5\text{ mA} \leq I_{OUT} \leq 1.0\text{ A}$, $P_D \leq 15\text{ W}$	9.75		10.25	
Line Regulation	$\Delta\text{REG}_{\text{line}}$	$T_J = 25^\circ\text{C}$	$12.5\text{ V} \leq V_{IN} < 28\text{ V}$	10	240	mV
Load Regulation	$\Delta\text{REG}_{\text{load}}$		$13.0\text{ V} \leq V_{IN} < 17\text{ V}$	3	120	
			$10\text{ mA} \leq I_{OUT} < 1.5\text{ A}$	12	240	
			$250\text{ mA} \leq I_{OUT} < 750\text{ mA}$	4	120	
Quiescent Current	I_Q	$I_{OUT} = 0$, $T_J = 25^\circ\text{C}$		4.3	8	mA
Quiescent Current Change	ΔI_Q	$12.5\text{ V} \leq V_{IN} \leq 28\text{ V}$			1	
		$5\text{ mA} \leq I_{OUT} \leq 1.0\text{ A}$			0.5	
Output Noise Voltage	V_N	$10\text{ Hz} \leq f \leq 100\text{ kHz}$, $T_J = 25^\circ\text{C}$		52		μV
Ripple Rejection	RR	$f = 120\text{ Hz}$, $13\text{ V} \leq V_{IN} \leq 23\text{ V}$	54	72		dB
Dropout Voltage	V_{DROD}	$I_{OUT} = 1.0\text{ A}$, $T_J = 25^\circ\text{C}$		2		V
Output Resistance	R_{OUT}	$f = 1\text{ kHz}$		16		$\text{m}\Omega$
Output Short Circuit	I_{OS}	$T_J = 25^\circ\text{C}$		450		mA
Peak Output	$I_{OUT(\text{peak})}$			1.5		A
Temperature Coefficient	$\Delta V_{OUT}/\Delta T_J$	$I_{OUT} = 5\text{ mA}$, $0^\circ\text{C} \leq T_J \leq 125^\circ\text{C}$		-1		$\text{mV}/^\circ\text{C}$



SPECIFICATIONS		SiP7812BA					
Parameter	Symbol	Test Conditions Unless Specified $V_{IN} = 19\text{ V}$, $I_{OUT} = 500\text{ mA}$, $C_{IN} = 0.33\text{ }\mu\text{F}$, $C_{OUT} = 0.1\text{ }\mu\text{F}$ $0^\circ\text{C} \leq T_J \leq 125^\circ\text{C}$	Limits			Unit	
			Min	Typ	Max		
Output Voltage	V_{OUT}	$T_J = 25^\circ\text{C}$	11.76	12.0	12.24	V	
		$14.5\text{ V} \leq V_{IN} \leq 27\text{ V}$, $5\text{ mA} \leq I_{OUT} \leq 1.0\text{ A}$, $P_D \leq 15\text{ W}$	11.66		12.34		
Line Regulation	ΔREG_{line}	$T_J = 25^\circ\text{C}$		10	240	mV	
			$14.0\text{ V} \leq V_{IN} < 30\text{ V}$		3		120
			$15.0\text{ V} \leq V_{IN} < 19\text{ V}$		12		240
Load Regulation	ΔREG_{load}		$10\text{ mA} \leq I_{OUT} < 1.5\text{ A}$		4		120
Quiescent Current	I_Q	$I_{OUT} = 0$, $T_J = 25^\circ\text{C}$		4.3	8	mA	
Quiescent Current Change	ΔI_Q	$14.5\text{ V} \leq V_{IN} \leq 30\text{ V}$			1		
		$5\text{ mA} \leq I_{OUT} \leq 1.0\text{ A}$			0.5		
Output Noise Voltage	V_N	$10\text{ Hz} \leq f \leq 100\text{ kHz}$, $T_J = 25^\circ\text{C}$		75		μV	
Ripple Rejection	RR	$f = 120\text{ Hz}$, $15\text{ V} \leq V_{IN} \leq 25\text{ V}$	55	71		dB	
Dropout Voltage	V_{DROP}	$I_{OUT} = 1.0\text{ A}$, $T_J = 25^\circ\text{C}$		2		V	
Output Resistance	R_{OUT}	$f = 1\text{ kHz}$		18		$\text{m}\Omega$	
Output Short Circuit	I_{OS}	$T_J = 25^\circ\text{C}$		350		mA	
Peak Output	$I_{OUT(peak)}$				1.5		A
Temperature Coefficient	$\Delta V_{OUT}/\Delta T_J$	$I_{OUT} = 5\text{ mA}$, $0^\circ\text{C} \leq T_J \leq 125^\circ\text{C}$		-1		$\text{mV}/^\circ\text{C}$	

SPECIFICATIONS		SiP7815BA					
Parameter	Symbol	Test Conditions Unless Specified $V_{IN} = 23\text{ V}$, $I_{OUT} = 500\text{ mA}$, $C_{IN} = 0.33\text{ }\mu\text{F}$, $C_{OUT} = 0.1\text{ }\mu\text{F}$ $0^\circ\text{C} \leq T_J \leq 125^\circ\text{C}$	Limits			Unit	
			Min	Typ	Max		
Output Voltage	V_{OUT}	$T_J = 25^\circ\text{C}$	14.7	15.0	15.3	V	
		$17.5\text{ V} \leq V_{IN} \leq 30\text{ V}$, $5\text{ mA} \leq I_{OUT} \leq 1.0\text{ A}$, $P_D \leq 15\text{ W}$	14.55		15.45		
Line Regulation	ΔREG_{line}	$T_J = 25^\circ\text{C}$		11	300	mV	
			$17.5\text{ V} \leq V_{IN} < 30\text{ V}$		3		150
			$13.0\text{ V} \leq V_{IN} < 17\text{ V}$		12		300
Load Regulation	ΔREG_{load}		$10\text{ mA} \leq I_{OUT} < 1.5\text{ A}$		4		150
Quiescent Current	I_Q	$I_{OUT} = 0$, $T_J = 25^\circ\text{C}$		4.4	8	mA	
Quiescent Current Change	ΔI_Q	$17.5\text{ V} \leq V_{IN} \leq 30\text{ V}$			1		
		$5\text{ mA} \leq I_{OUT} \leq 1.0\text{ A}$			0.5		
Output Noise Voltage	V_N	$10\text{ Hz} \leq f \leq 100\text{ kHz}$, $T_J = 25^\circ\text{C}$		90		μV	
Ripple Rejection	RR	$f = 120\text{ Hz}$, $18\text{ V} \leq V_{IN} \leq 28\text{ V}$	54	70		dB	
Dropout Voltage	V_{DROP}	$I_{OUT} = 1.0\text{ A}$, $T_J = 25^\circ\text{C}$		2		V	
Output Resistance	R_{OUT}	$f = 1\text{ kHz}$		19		$\text{m}\Omega$	
Output Short Circuit	I_{OS}	$T_J = 25^\circ\text{C}$		230		mA	
Peak Output	$I_{OUT(peak)}$				1.5		A
Temperature Coefficient	$\Delta V_{OUT}/\Delta T_J$	$I_{OUT} = 5\text{ mA}$, $0^\circ\text{C} \leq T_J \leq 125^\circ\text{C}$		-1		$\text{mV}/^\circ\text{C}$	

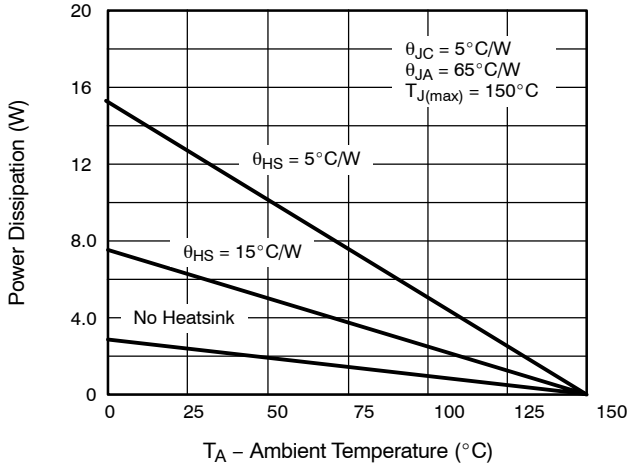
SPECIFICATIONS		SiP7818BA				
Parameter	Symbol	Test Conditions Unless Specified $V_{IN} = 27\text{ V}$, $I_{OUT} = 500\text{ mA}$, $C_{IN} = 0.33\text{ }\mu\text{F}$, $C_{OUT} = 0.1\text{ }\mu\text{F}$ $0^\circ\text{C} \leq T_J \leq 125^\circ\text{C}$	Limits			Unit
			Min	Typ	Max	
Output Voltage	V_{OUT}	$T_J = 25^\circ\text{C}$	17.64	18.0	18.36	V
		$21\text{ V} \leq V_{IN} \leq 33\text{ V}$, $5\text{ mA} \leq I_{OUT} \leq 1.0\text{ A}$, $P_D \leq 15\text{ W}$	17.44		18.56	
Line Regulation	$\Delta\text{REG}_{\text{line}}$	$T_J = 25^\circ\text{C}$	$21.0\text{ V} \leq V_{IN} < 33\text{ V}$	15	360	mV
Load Regulation	$\Delta\text{REG}_{\text{load}}$		$22.0\text{ V} \leq V_{IN} < 26\text{ V}$	5	180	
			$10\text{ mA} \leq I_{OUT} < 1.5\text{ A}$	12	360	
			$250\text{ mA} \leq I_{OUT} < 750\text{ mA}$	4	180	
Quiescent Current	I_Q	$I_{OUT} = 0$, $T_J = 25^\circ\text{C}$		4.5	8	mA
Quiescent Current Change	ΔI_Q	$21.0\text{ V} \leq V_{IN} \leq 33\text{ V}$			1	
		$5\text{ mA} \leq I_{OUT} \leq 1.0\text{ A}$			0.5	
Output Noise Voltage	V_N	$10\text{ Hz} \leq f \leq 100\text{ kHz}$, $T_J = 25^\circ\text{C}$		110		μV
Ripple Rejection	RR	$f = 120\text{ Hz}$, $21\text{ V} \leq V_{IN} \leq 31\text{ V}$	53	69		dB
Dropout Voltage	V_{DROD}	$I_{OUT} = 1.0\text{ A}$, $T_J = 25^\circ\text{C}$		2		V
Output Resistance	R_{OUT}	$f = 1\text{ kHz}$		22		$\text{m}\Omega$
Output Short Circuit	I_{OS}	$T_J = 25^\circ\text{C}$		200		mA
Peak Output	$I_{OUT(\text{peak})}$			1.5		A
Temperature Coefficient	$\Delta V_{OUT}/\Delta T_J$	$I_{OUT} = 5\text{ mA}$, $0^\circ\text{C} \leq T_J \leq 125^\circ\text{C}$		-1		$\text{mV}/^\circ\text{C}$

SPECIFICATIONS		SiP7824BA				
Parameter	Symbol	Test Conditions Unless Specified $V_{IN} = 33\text{ V}$, $I_{OUT} = 500\text{ mA}$, $C_{IN} = 0.33\text{ }\mu\text{F}$, $C_{OUT} = 0.1\text{ }\mu\text{F}$ $0^\circ\text{C} \leq T_J \leq 125^\circ\text{C}$	Limits			Unit
			Min	Typ	Max	
Output Voltage	V_{OUT}	$T_J = 25^\circ\text{C}$	23.52	24.0	24.48	V
		$26.0\text{ V} \leq V_{IN} \leq 38\text{ V}$, $5\text{ mA} \leq I_{OUT} \leq 1.0\text{ A}$, $P_D \leq 15\text{ W}$	23.32		24.68	
Line Regulation	$\Delta\text{REG}_{\text{line}}$	$T_J = 25^\circ\text{C}$	$26.0\text{ V} \leq V_{IN} < 38\text{ V}$	18	480	mV
Load Regulation	$\Delta\text{REG}_{\text{load}}$		$27.0\text{ V} \leq V_{IN} < 32\text{ V}$	6	240	
			$10\text{ mA} \leq I_{OUT} < 1.5\text{ A}$	12	480	
			$250\text{ mA} \leq I_{OUT} < 750\text{ mA}$	4	240	
Quiescent Current	I_Q	$I_{OUT} = 0$, $T_J = 25^\circ\text{C}$		4.6	8	mA
Quiescent Current Change	ΔI_Q	$26.0\text{ V} \leq V_{IN} \leq 38\text{ V}$			1	
		$5\text{ mA} \leq I_{OUT} \leq 1.0\text{ A}$			0.5	
Output Noise Voltage	V_N	$10\text{ Hz} \leq f \leq 100\text{ kHz}$, $T_J = 25^\circ\text{C}$		170		μV
Ripple Rejection	RR	$f = 120\text{ Hz}$, $26\text{ V} \leq V_{IN} \leq 36\text{ V}$	55	66		dB
Dropout Voltage	V_{DROD}	$I_{OUT} = 1.0\text{ A}$, $T_J = 25^\circ\text{C}$		2		V
Output Resistance	R_{OUT}	$f = 1\text{ kHz}$		28		$\text{m}\Omega$
Output Short Circuit	I_{OS}	$T_J = 25^\circ\text{C}$		150		mA
Peak Output	$I_{OUT(\text{peak})}$			1.5		A
Temperature Coefficient	$\Delta V_{OUT}/\Delta T_J$	$I_{OUT} = 5\text{ mA}$, $0^\circ\text{C} \leq T_J \leq 125^\circ\text{C}$		-1.5		$\text{mV}/^\circ\text{C}$

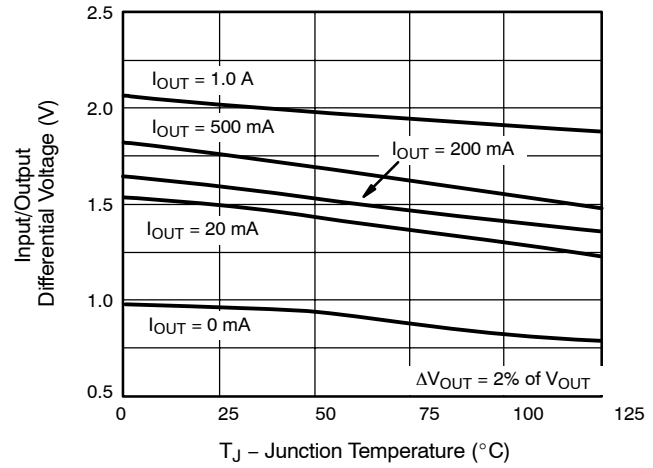


TYPICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ Unless Otherwise Noted)

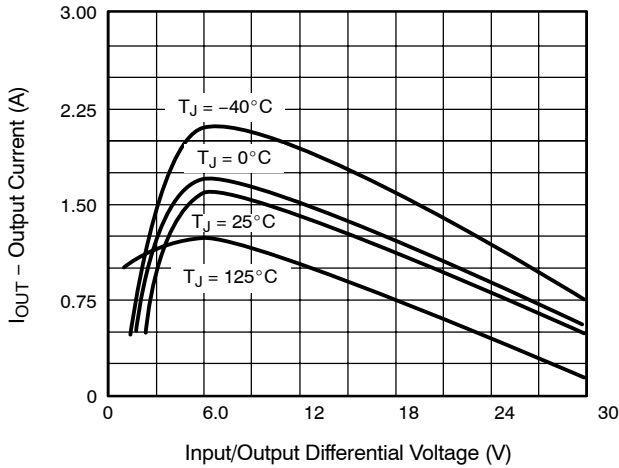
Power Dissipation vs. Ambient Temperature



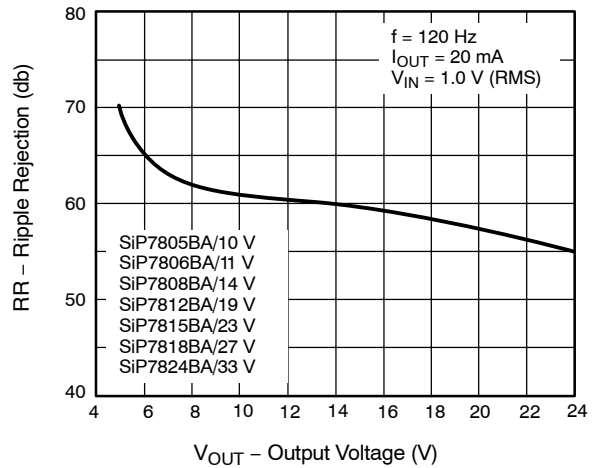
Dropout Voltage vs. Junction Temperature



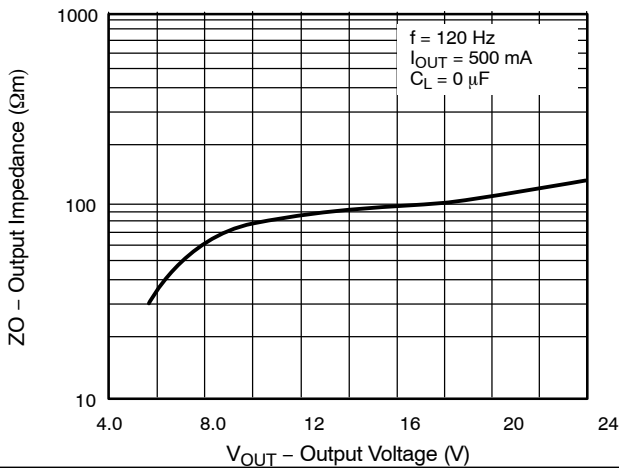
Peak Output Current



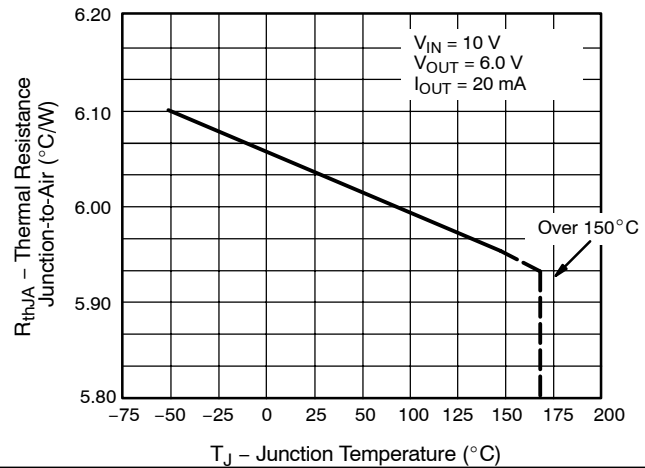
Ripple Rejection Ratio vs. Output Voltage



Output Impedance (mΩ) vs. Output Voltage



Output Voltage vs. Junction Temperature



TYPICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ Unless Otherwise Noted)

