



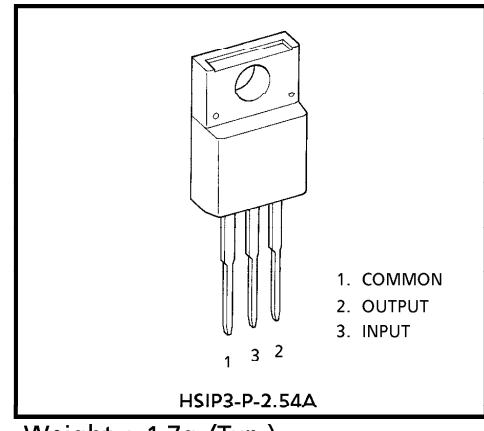
**TA79005S, TA79006S, TA79007S, TA79008S, TA79009S, TA79010S  
TA79012S, TA79015S, TA79018S, TA79020S, TA79024S**

## 1A THREE TERMINAL NEGATIVE VOLTAGE REGULATORS

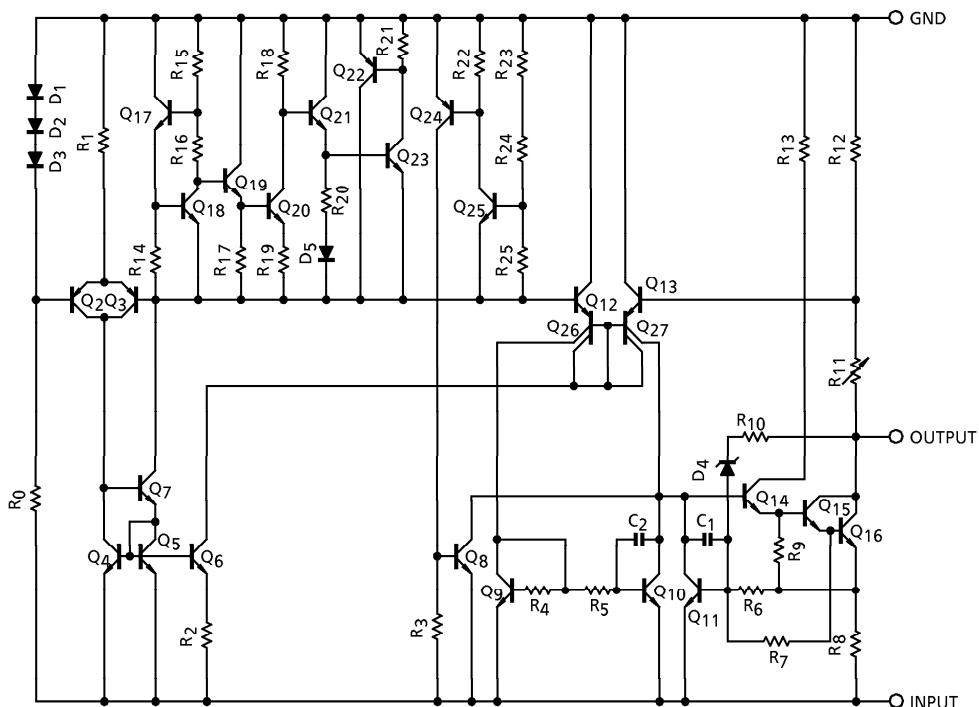
**-5V, -6V, -7V, -8V, -9V, -10V, -12V, -15V, -18V, -20V,  
-24V**

### FEATURES

- Suitable for CMOS, TTL, and the other Digital IC Power Supply
- Internal Thermal Overload Protecting
- Internal Short Circuit Current Limiting
- Output Current in Excess of 1.0A
- Metal Fin (Tab) is fully covered with Mold Resin.  
(TO-220 NIS package)



### EQUIVALENT CIRCUIT



---

**MAXIMUM RATINGS (Ta = 25°C)**

CHARACTERISTIC		SYMBOL	RATING	UNIT	
Input Voltage	TA79005S	V <sub>IN</sub>	−35	V	
	TA79006S				
	TA79007S				
	TA79008S				
	TA79009S				
	TA79010S		−40		
	TA79012S				
	TA79015S				
	TA79018S				
	TA79020S				
Power Dissipation	(Ta = 25°C)	P <sub>D</sub>	2	W	
	(Tc = 25°C)		20		
Operating Temperature		T <sub>opr</sub>	−30~75	°C	
Storage Temperature		T <sub>stg</sub>	−55~150	°C	
Operating Junction Temperature		T <sub>j</sub>	−30~150	°C	
Thermal Resistance		R <sub>th</sub> (j-c)	6.25	°C/W	
		R <sub>th</sub> (j-a)	62.5		

## TA79005S

## ELECTRICAL CHARACTERISTICS

(Unless otherwise specified,  $V_{IN} = -10V$ ,  $I_{OUT} = 500mA$ ,  $0^\circ C \leq T_j \leq 125^\circ C$ ,  $C_{IN} = 1.0\mu F$ ,  $C_{OUT} = 1.0\mu F$ )

CHARACTERISTIC	SYMBOL	TEST CIR-CUIT	TEST CONDITION		MIN.	TYP.	MAX.	UNIT
Output Voltage	$V_{OUT}$	1	$T_j = 25^\circ C$		-5.2	-5.0	-4.8	V
Line Regulation	Reg.Line	1	$T_j = 25^\circ C$	$-12V \leq V_{IN} \leq -8V$	—	7	50	mV
				$-25V \leq V_{IN} \leq -7V$	—	35	100	
Load Regulation	Reg.Load	1	$T_j = 25^\circ C$	$5mA \leq I_{OUT} \leq 1.5A$	—	11	100	mV
				$250mA \leq I_{OUT} \leq 750mA$	—	4	50	
Output Voltage	$V_{OUT}$	1	$T_j = 25^\circ C$	$-20V \leq V_{IN} \leq -7V$	-5.25	—	-4.75	V
Quiescent Current	$I_B$	1	$T_j = 25^\circ C$		—	4.3	8.0	mA
Quiescent Current Change	Line	$\Delta I_{BI}$	1	$-25V \leq V_{IN} \leq -7V$	—	—	1.3	mA
	Load	$\Delta I_{BO}$	1	$5mA \leq I_{OUT} \leq 1.0A$	—	—	0.5	
Output Noise Voltage	$V_{NO}$	2	$T_a = 25^\circ C$ , $10Hz \leq f \leq 100kHz$		—	40	—	$\mu V_{rms}$
Ripple Rejection	R.R.	3	$f = 120Hz$ , $I_{OUT} = 20mA$		63	70	—	dB
Short Circuit Current Limit	$I_{SC}$	1	$T_j = 25^\circ C$		—	1.9	—	A
Average Temperature Coefficient Of Output Voltage	$T_{CVO}$	1	$I_{OUT} = 5.0mA$		—	0.6	—	$mV / ^\circ C$
Dropout Voltage	$V_D$	1	$T_j = 25^\circ C$ , $I_{OUT} = 1.0A$		—	2.0	—	V

## TA79006S

## ELECTRICAL CHARACTERISTICS

(Unless otherwise specified,  $V_{IN} = -11V$ ,  $I_{OUT} = 500mA$ ,  $0^\circ C \leq T_j \leq 125^\circ C$ ,  $C_{IN} = 1.0\mu F$ ,  $C_{OUT} = 1.0\mu F$ )

CHARACTERISTIC	SYMBOL	TEST CIR-CUIT	TEST CONDITION		MIN.	TYP.	MAX.	UNIT
Output Voltage	$V_{OUT}$	1	$T_j = 25^\circ C$		- 6.25	- 6.0	- 5.75	V
Line Regulation	Reg.Line	1	$T_j = 25^\circ C$	$-13V \leq V_{IN} \leq -9V$	—	9	60	mV
				$-25V \leq V_{IN} \leq -8V$	—	43	120	
Load Regulation	Reg.Load	1	$T_j = 25^\circ C$	$5mA \leq I_{OUT} \leq 1.5A$	—	13	120	mV
				$250mA \leq I_{OUT} \leq 750mA$	—	5	60	
Output Voltage	$V_{OUT}$	1	$T_j = 25^\circ C$	$-21V \leq V_{IN} \leq -8V$	- 6.3	—	- 5.7	V
Quiescent Current	$I_B$	1	$T_j = 25^\circ C$		—	4.3	8.0	mA
Quiescent Current Change	Line	$\Delta I_{BI}$	1	$-25V \leq V_{IN} \leq -8V$	—	—	1.3	mA
	Load	$\Delta I_{BO}$	1	$5mA \leq I_{OUT} \leq 1.0A$	—	—	0.5	
Output Noise Voltage	$V_{NO}$	2	$T_a = 25^\circ C$ , $10Hz \leq f \leq 100kHz$		—	45	—	$\mu V_{rms}$
Ripple Rejection	R.R.	3	$f = 120Hz$ , $I_{OUT} = 20mA$		61	68	—	dB
Short Circuit Current Limit	$I_{SC}$	1	$T_j = 25^\circ C$		—	1.9	—	A
Average Temperature Coefficient Of Output Voltage	$T_{CVO}$	1	$I_{OUT} = 5.0mA$		—	0.7	—	$mV / ^\circ C$
Dropout Voltage	$V_D$	1	$T_j = 25^\circ C$ , $I_{OUT} = 1.0A$		—	2.0	—	V

## TA79007S

## ELECTRICAL CHARACTERISTICS

(Unless otherwise specified,  $V_{IN} = -12V$ ,  $I_{OUT} = 500mA$ ,  $0^\circ C \leq T_j \leq 125^\circ C$ ,  $C_{IN} = 1.0\mu F$ ,  $C_{OUT} = 1.0\mu F$ )

CHARACTERISTIC	SYMBOL	TEST CIR-CUIT	TEST CONDITION		MIN.	TYP.	MAX.	UNIT
Output Voltage	$V_{OUT}$	1	$T_j = 25^\circ C$		-7.28	-7.0	-6.72	V
Line Regulation	Reg.Line	1	$T_j = 25^\circ C$	$-15V \leq V_{IN} \leq -10V$	—	10	70	mV
				$-25V \leq V_{IN} \leq -9V$	—	45	140	
Load Regulation	Reg.Load	1	$T_j = 25^\circ C$	$5mA \leq I_{OUT} \leq 1.5A$	—	20	140	mV
				$250mA \leq I_{OUT} \leq 750mA$	—	7	70	
Output Voltage	$V_{OUT}$	1	$T_j = 25^\circ C$	$-22V \leq V_{IN} \leq -9V$	-7.35	—	-6.65	V
Quiescent Current	$I_B$	1	$T_j = 25^\circ C$		—	4.3	8.0	mA
Quiescent Current Change	Line	$\Delta I_{BI}$	1	$-25V \leq V_{IN} \leq -9V$	—	—	1.0	mA
	Load	$\Delta I_{BO}$	1	$5mA \leq I_{OUT} \leq 1.0A$	—	—	0.5	
Output Noise Voltage	$V_{NO}$	2	$T_a = 25^\circ C$ , $10Hz \leq f \leq 100kHz$		—	49	—	$\mu V_{rms}$
Ripple Rejection	R.R.	3	$f = 120Hz$ , $I_{OUT} = 20mA$		60	67	—	dB
Short Circuit Current Limit	$I_{SC}$	1	$T_j = 25^\circ C$		—	1.9	—	A
Average Temperature Coefficient Of Output Voltage	$T_{CVO}$	1	$I_{OUT} = 5.0mA$		—	0.9	—	$mV / ^\circ C$
Dropout Voltage	$V_D$	1	$T_j = 25^\circ C$ , $I_{OUT} = 1.0 A$		—	2.0	—	V

## TA79008S

**ELECTRICAL CHARACTERISTICS**(Unless otherwise specified,  $V_{IN} = -14V$ ,  $I_{OUT} = 500mA$ ,  $0^\circ C \leq T_j \leq 125^\circ C$ ,  $C_{IN} = 1.0\mu F$ ,  $C_{OUT} = 1.0\mu F$ )

CHARACTERISTIC	SYMBOL	TEST CIR-CUIT	TEST CONDITION		MIN.	TYP.	MAX.	UNIT
Output Voltage	$V_{OUT}$	1	$T_j = 25^\circ C$		-8.3	-8.0	-7.7	V
Line Regulation	Reg.Line	1	$T_j = 25^\circ C$	$-17V \leq V_{IN} \leq -11V$	—	11	80	mV
				$-25V \leq V_{IN} \leq -10.5V$	—	47	160	
Load Regulation	Reg.Load	1	$T_j = 25^\circ C$	$5mA \leq I_{OUT} \leq 1.5A$	—	26	160	mV
				$250mA \leq I_{OUT} \leq 750mA$	—	9	80	
Output Voltage	$V_{OUT}$	1	$T_j = 25^\circ C$	$-23V \leq V_{IN} \leq -10.5V$	-8.4	—	-7.6	V
Quiescent Current	$I_B$	1	$T_j = 25^\circ C$		—	4.3	8.0	mA
Quiescent Current Change	Line	$\Delta I_{BI}$	1	$-25V \leq V_{IN} \leq -10.5V$	—	—	1.0	mA
	Load	$\Delta I_{BO}$	1	$5mA \leq I_{OUT} \leq 1.0A$	—	—	0.5	
Output Noise Voltage	$V_{NO}$	2	$T_a = 25^\circ C$ , $10Hz \leq f \leq 100kHz$		—	52	—	$\mu V_{rms}$
Ripple Rejection	R.R.	3	$f = 120Hz$ , $I_{OUT} = 20mA$		59	66	—	dB
Short Circuit Current Limit	$I_{SC}$	1	$T_j = 25^\circ C$		—	1.9	—	A
Average Temperature Coefficient Of Output Voltage	$T_{CVO}$	1	$I_{OUT} = 5.0mA$		—	1.0	—	$mV / ^\circ C$
Dropout Voltage	$V_D$	1	$T_j = 25^\circ C$ , $I_{OUT} = 1.0A$		—	2.0	—	V

## TA79009S

## ELECTRICAL CHARACTERISTICS

(Unless otherwise specified,  $V_{IN} = -15V$ ,  $I_{OUT} = 500mA$ ,  $0^\circ C \leq T_j \leq 125^\circ C$ ,  $C_{IN} = 1.0\mu F$ ,  $C_{OUT} = 1.0\mu F$ )

CHARACTERISTIC	SYMBOL	TEST CIR-CUIT	TEST CONDITION		MIN.	TYP.	MAX.	UNIT
Output Voltage	$V_{OUT}$	1	$T_j = 25^\circ C$		-9.3	-9.0	-8.7	V
Line Regulation	Reg.Line	1	$T_j = 25^\circ C$	$-19V \leq V_{IN} \leq -13V$	—	11	82	mV
				$-26V \leq V_{IN} \leq -11.5V$	—	48	162	
Load Regulation	Reg.Load	1	$T_j = 25^\circ C$	$5mA \leq I_{OUT} \leq 1.5A$	—	33	162	mV
				$250mA \leq I_{OUT} \leq 750mA$	—	11	82	
Output Voltage	$V_{OUT}$	1	$T_j = 25^\circ C$	$-24V \leq V_{IN} \leq -11.5V$	-9.4	—	-8.6	V
Quiescent Current	$I_B$	1	$T_j = 25^\circ C$		—	4.3	8.0	mA
Quiescent Current Change	Line	$\Delta I_{BI}$	1	$-26.5V \leq V_{IN} \leq -13V$	—	—	1.0	mA
	Load	$\Delta I_{BO}$	1	$5mA \leq I_{OUT} \leq 1.0A$	—	—	0.5	
Output Noise Voltage	$V_{NO}$	2	$T_a = 25^\circ C$ , $10Hz \leq f \leq 100kHz$		—	60	—	$\mu V_{rms}$
Ripple Rejection	R.R.	3	$f = 120Hz$ , $I_{OUT} = 20mA$		57	64	—	dB
Short Circuit Current Limit	$I_{SC}$	1	$T_j = 25^\circ C$		—	1.9	—	A
Average Temperature Coefficient Of Output Voltage	$T_{CVO}$	1	$I_{OUT} = 5.0mA$		—	1.1	—	$mV / ^\circ C$
Dropout Voltage	$V_D$	1	$T_j = 25^\circ C$ , $I_{OUT} = 1.0A$		—	2.0	—	V

## TA79010S

## ELECTRICAL CHARACTERISTICS

(Unless otherwise specified,  $V_{IN} = -16V$ ,  $I_{OUT} = 500mA$ ,  $0^\circ C \leq T_j \leq 125^\circ C$ ,  $C_{IN} = 1.0\mu F$ ,  $C_{OUT} = 1.0\mu F$ )

CHARACTERISTIC	SYMBOL	TEST CIR-CUIT	TEST CONDITION		MIN.	TYP.	MAX.	UNIT
Output Voltage	$V_{OUT}$	1	$T_j = 25^\circ C$		-10.4	-10	-9.6	V
Line Regulation	Reg.Line	1	$T_j = 25^\circ C$	$-20V \leq V_{IN} \leq -14V$	—	12	90	mV
				$-27V \leq V_{IN} \leq -12.5V$	—	50	180	
Load Regulation	Reg.Load	1	$T_j = 25^\circ C$	$5mA \leq I_{OUT} \leq 1.5A$	—	40	180	mV
				$250mA \leq I_{OUT} \leq 750mA$	—	13	90	
Output Voltage	$V_{OUT}$	1	$T_j = 25^\circ C$	$-25V \leq V_{IN} \leq -12.5V$	-10.5	—	-9.5	V
Quiescent Current	$I_B$	1	$T_j = 25^\circ C$		—	4.4	8.0	mA
Quiescent Current Change	Line	$\Delta I_{BI}$	1	$-27.5V \leq V_{IN} \leq -14V$	—	—	1.0	mA
	Load	$\Delta I_{BO}$	1	$5mA \leq I_{OUT} \leq 1.0A$	—	—	0.5	
Output Noise Voltage	$V_{NO}$	2	$T_a = 25^\circ C$ , $10Hz \leq f \leq 100kHz$		—	65	—	$\mu V_{rms}$
Ripple Rejection	R.R.	3	$f = 120Hz$ , $I_{OUT} = 20mA$		57	63	—	dB
Short Circuit Current Limit	$I_{SC}$	1	$T_j = 25^\circ C$		—	1.9	—	A
Average Temperature Coefficient Of Output Voltage	$T_{CVO}$	1	$I_{OUT} = 5.0mA$		—	1.3	—	$mV / ^\circ C$
Dropout Voltage	$V_D$	1	$T_j = 25^\circ C$ , $I_{OUT} = 1.0A$		—	2.0	—	V

## TA79012S

## ELECTRICAL CHARACTERISTICS

(Unless otherwise specified,  $V_{IN} = -19V$ ,  $I_{OUT} = 500mA$ ,  $0^\circ C \leq T_j \leq 125^\circ C$ ,  $C_{IN} = 1.0\mu F$ ,  $C_{OUT} = 1.0\mu F$ )

CHARACTERISTIC	SYMBOL	TEST CIR-CUIT	TEST CONDITION		MIN.	TYP.	MAX.	UNIT
Output Voltage	$V_{OUT}$	1	$T_j = 25^\circ C$		-12.5	-12	-11.5	V
Line Regulation	Reg.Line	1	$T_j = 25^\circ C$	$-22V \leq V_{IN} \leq -16V$	—	13	120	mV
				$-30V \leq V_{IN} \leq -14.5V$	—	55	240	
Load Regulation	Reg.Load	1	$T_j = 25^\circ C$	$5mA \leq I_{OUT} \leq 1.5A$	—	46	240	mV
				$250mA \leq I_{OUT} \leq 750mA$	—	17	120	
Output Voltage	$V_{OUT}$	1	$T_j = 25^\circ C$	$-27V \leq V_{IN} \leq -14.5V$	-12.6	—	-11.4	V
Quiescent Current	$I_B$	1	$T_j = 25^\circ C$		—	4.4	8.0	mA
Quiescent Current Change	Line	$\Delta I_{BL}$	1	$-30V \leq V_{IN} \leq -14.5V$	—	—	1.0	mA
	Load	$\Delta I_{BO}$	1	$5mA \leq I_{OUT} \leq 1.0A$	—	—	0.5	
Output Noise Voltage	$V_{NO}$	2	$T_a = 25^\circ C$ , $10Hz \leq f \leq 100kHz$		—	75	—	$\mu V_{rms}$
Ripple Rejection	R.R.	3	$f = 120Hz$ , $I_{OUT} = 20mA$		54	61	—	dB
Short Circuit Current Limit	$I_{SC}$	1	$T_j = 25^\circ C$		—	1.9	—	A
Average Temperature Coefficient Of Output Voltage	$T_{CVO}$	1	$I_{OUT} = 5.0mA$		—	1.6	—	$mV / ^\circ C$
Dropout Voltage	$V_D$	1	$T_j = 25^\circ C$ , $I_{OUT} = 1.0A$		—	2.0	—	V

---

TA79015S

**ELECTRICAL CHARACTERISTICS**

(Unless otherwise specified,  $V_{IN} = -23V$ ,  $I_{OUT} = 500mA$ ,  $0^\circ C \leq T_j \leq 125^\circ C$ ,  $C_{IN} = 1.0\mu F$ ,  $C_{OUT} = 1.0\mu F$ )

CHARACTERISTIC	SYMBOL	TEST CIR-CUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT	
Output Voltage	$V_{OUT}$	1	$T_j = 25^\circ C$	-15.6	-15	-14.4	V	
Line Regulation	Reg.Line	1	$T_j = 25^\circ C$	$-26V \leq V_{IN} \leq -20V$	—	14	150	
				$-30V \leq V_{IN} \leq -17.5V$	—	57	300	
Load Regulation	Reg.Load	1	$T_j = 25^\circ C$	$5mA \leq I_{OUT} \leq 1.5A$	—	68	300	
				$250mA \leq I_{OUT} \leq 750mA$	—	25	150	
Output Voltage	$V_{OUT}$	1	$T_j = 25^\circ C$	$-30V \leq V_{IN} \leq -17.5V$	-15.75	—	-14.25	V
Quiescent Current	$I_B$	1	$T_j = 25^\circ C$	—	4.4	8.0	mA	
Quiescent Current Change	Line Load	1	$T_j = 25^\circ C$	$-30V \leq V_{IN} \leq -17.5V$	—	—	1.0	
				$5mA \leq I_{OUT} \leq 1.0A$	—	—	0.5	
Output Noise Voltage	$V_{NO}$	2	$T_a = 25^\circ C$ , $10Hz \leq f \leq 100kHz$	—	90	—	$\mu V_{rms}$	
Ripple Rejection	R.R.	3	$f = 120Hz$ , $I_{OUT} = 20mA$	53	60	—	dB	
Short Circuit Current Limit	$I_{SC}$	1	$T_j = 25^\circ C$	—	1.9	—	A	
Average Temperature Coefficient Of Output Voltage	$T_{CVO}$	1	$I_{OUT} = 5.0mA$	—	2.0	—	$mV / ^\circ C$	
Dropout Voltage	$V_D$	1	$T_j = 25^\circ C$ , $I_{OUT} = 1.0A$	—	2.0	—	V	

## TA79018S

## ELECTRICAL CHARACTERISTICS

(Unless otherwise specified,  $V_{IN} = -27V$ ,  $I_{OUT} = 500mA$ ,  $0^\circ C \leq T_j \leq 125^\circ C$ ,  $C_{IN} = 1.0\mu F$ ,  $C_{OUT} = 1.0\mu F$ )

CHARACTERISTIC	SYMBOL	TEST CIR-CUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT	
Output Voltage	$V_{OUT}$	1	$T_j = 25^\circ C$	-18.7	-18	-17.3	V	
Line Regulation	Reg.Line	1	$T_j = 25^\circ C$	$-30V \leq V_{IN} \leq -24V$	—	25	180	
				$-33V \leq V_{IN} \leq -21V$	—	80	360	
Load Regulation	Reg.Load	1	$T_j = 25^\circ C$	$5mA \leq I_{OUT} \leq 1.5A$	—	110	360	
				$250mA \leq I_{OUT} \leq 750mA$	—	55	180	
Output Voltage	$V_{OUT}$	1	$T_j = 25^\circ C$	$-33V \leq V_{IN} \leq -21V$ $5mA \leq I_{OUT} \leq 1.0A$	-18.85	—	-17.15	V
Quiescent Current	$I_B$	1	$T_j = 25^\circ C$	—	4.5	8.0	mA	
Quiescent Current Change	Line	$\Delta I_{BL}$	1	$-33V \leq V_{IN} \leq -21V$	—	—	1.0	mA
	Load	$\Delta I_{BO}$	1	$5mA \leq I_{OUT} \leq 1.0A$	—	—	0.5	
Output Noise Voltage	$V_{NO}$	2	$T_a = 25^\circ C$ , $10Hz \leq f \leq 100kHz$	—	110	—	$\mu V_{rms}$	
Ripple Rejection	R.R.	3	$f = 120Hz$ , $I_{OUT} = 20mA$	52	59	—	dB	
Short Circuit Current Limit	$I_{SC}$	1	$T_j = 25^\circ C$	—	1.9	—	A	
Average Temperature Coefficient Of Output Voltage	$T_{CVO}$	1	$I_{OUT} = 5.0mA$	—	2.5	—	$mV / ^\circ C$	
Dropout Voltage	$V_D$	1	$T_j = 25^\circ C$ , $I_{OUT} = 1.0A$	—	2.0	—	V	

---

TA79020S

ELECTRICAL CHARACTERISTICS

(Unless otherwise specified,  $V_{IN} = -30V$ ,  $I_{OUT} = 500mA$ ,  $0^\circ C \leq T_j \leq 125^\circ C$ ,  $C_{IN} = 1.0\mu F$ ,  $C_{OUT} = 1.0\mu F$ )

CHARACTERISTIC	SYMBOL	TEST CIR-CUIT	TEST CONDITION		MIN.	TYP.	MAX.	UNIT
Output Voltage	$V_{OUT}$	1	$T_j = 25^\circ C$		-20.8	-20	-19.2	V
Line Regulation	Reg.Line	1	$T_j = 25^\circ C$	$-32V \leq V_{IN} \leq -26V$	—	28	180	mV
				$-35V \leq V_{IN} \leq -24V$	—	104	360	
Load Regulation	Reg.Load	1	$T_j = 25^\circ C$	$5mA \leq I_{OUT} \leq 1.5A$	—	130	360	mV
				$250mA \leq I_{OUT} \leq 750mA$	—	70	180	
Output Voltage	$V_{OUT}$	1	$T_j = 25^\circ C$	$-35V \leq V_{IN} \leq -24V$	-21.0	—	-19.0	V
Quiescent Current	$I_B$	1	$T_j = 25^\circ C$		—	4.6	8.0	mA
Quiescent Current Change	Line	$\Delta I_{BI}$	1	$-36.5V \leq V_{IN} \leq -25V$	—	—	1.0	mA
	Load	$\Delta I_{BO}$	1	$5mA \leq I_{OUT} \leq 1.0A$	—	—	0.5	
Output Noise Voltage	$V_{NO}$	2	$T_a = 25^\circ C$ , $10Hz \leq f \leq 100kHz$		—	140	—	$\mu V_{rms}$
Ripple Rejection	R.R.	3	$f = 120Hz$ , $I_{OUT} = 20mA$		50	57	—	dB
Short Circuit Current Limit	$I_{SC}$	1	$T_j = 25^\circ C$		—	1.9	—	A
Average Temperature Coefficient Of Output Voltage	$T_{CVO}$	1	$I_{OUT} = 5.0mA$		—	3.0	—	$mV / ^\circ C$
Dropout Voltage	$V_D$	1	$T_j = 25^\circ C$ , $I_{OUT} = 1.0A$		—	2.0	—	V

---

TA79024S

ELECTRICAL CHARACTERISTICS

(Unless otherwise specified,  $V_{IN} = -33V$ ,  $I_{OUT} = 500mA$ ,  $0^\circ C \leq T_j \leq 125^\circ C$ ,  $C_{IN} = 1.0\mu F$ ,  $C_{OUT} = 1.0\mu F$ )

CHARACTERISTIC	SYMBOL	TEST CIR-CUIT	TEST CONDITION		MIN.	TYP.	MAX.	UNIT
Output Voltage	$V_{OUT}$	1	$T_j = 25^\circ C$		-25.0	-24	-23.0	V
Line Regulation	Reg.Line	1	$T_j = 25^\circ C$	$-36V \leq V_{IN} \leq -30V$	—	31	240	mV
				$-38V \leq V_{IN} \leq -27V$	—	118	480	
Load Regulation	Reg.Load	1	$T_j = 25^\circ C$	$5mA \leq I_{OUT} \leq 1.5A$	—	150	480	mV
				$250mA \leq I_{OUT} \leq 750mA$	—	85	240	
Output Voltage	$V_{OUT}$	1	$T_j = 25^\circ C$	$-38V \leq V_{IN} \leq -27V$	-25.2	—	-22.8	V
Quiescent Current	$I_B$	1	$T_j = 25^\circ C$		—	4.6	8.0	mA
Quiescent Current Change	Line	$\Delta I_{BI}$	1	$-38V \leq V_{IN} \leq -27V$	—	—	1.0	mA
	Load	$\Delta I_{BO}$	1	$5mA \leq I_{OUT} \leq 1.0A$	—	—	0.5	
Output Noise Voltage	$V_{NO}$	2	$T_a = 25^\circ C$ , $10Hz \leq f \leq 100kHz$		—	170	—	$\mu V_{rms}$
Ripple Rejection	R.R.	3	$f = 120Hz$ , $I_{OUT} = 20mA$		49	56	—	dB
Short Circuit Current Limit	$I_{SC}$	1	$T_j = 25^\circ C$		—	1.9	—	A
Average Temperature Coefficient Of Output Voltage	$T_{CVO}$	1	$I_{OUT} = 5.0mA$		—	3.5	—	$mV / ^\circ C$
Dropout Voltage	$V_D$	1	$T_j = 25^\circ C$ , $I_{OUT} = 1.0A$		—	2.0	—	V