TOSHIBA Bipolar Linear Integrated Circuit Silicon Monolithic

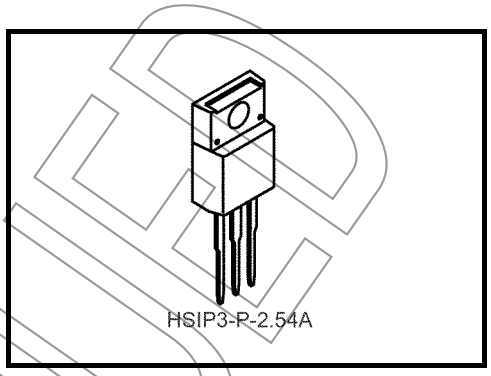
TA79005S, TA79006S, TA79007S, TA79008S, TA79009S, TA79010S, TA79012S, TA79015S, TA79018S, TA79020S, TA79024S

Output Current of 1A, Three-Terminal Negative Voltage Regulators

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

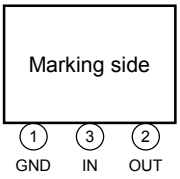
Features

- Suitable for CMOS, TTL, and the power supply of other digital ICs
- Internal thermal overload protection
- Internal short circuit current limiting
- Maximum output current of 1.0 A
- Metal fin (tab) fully covered with mold resin (TO-220 NIS package)

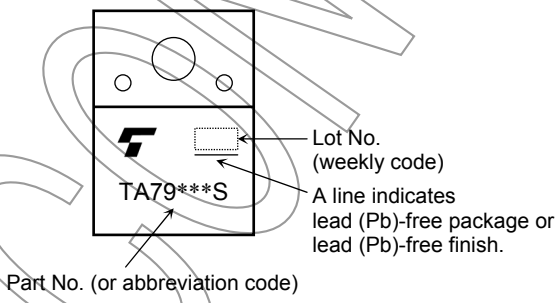


Weight: 1.7 g (typ.)

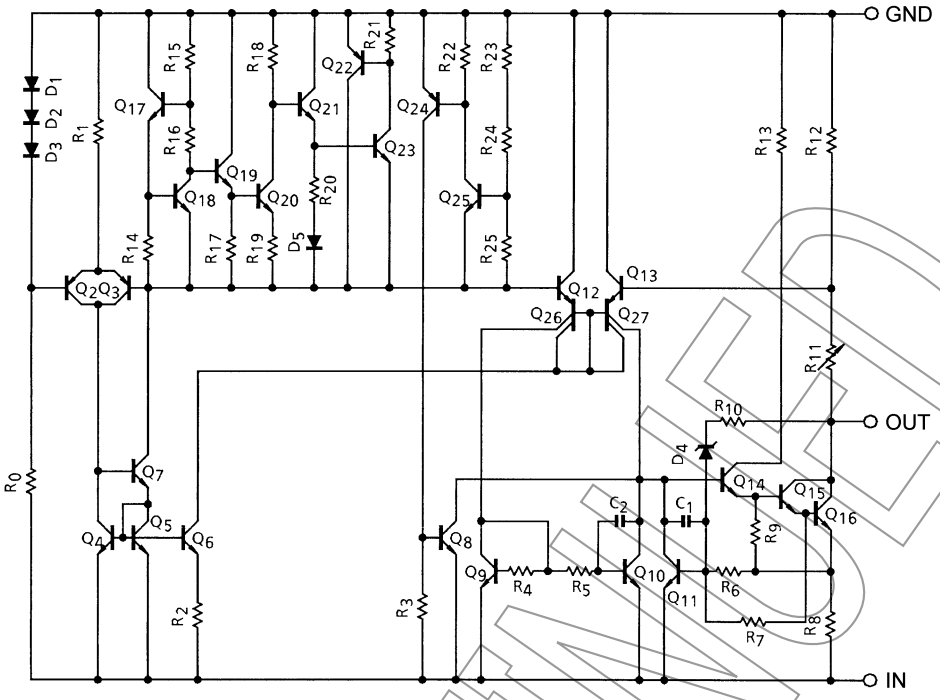
Pin Assignment



Marking



Equivalent Circuit



Absolute Maximum Ratings (Ta = 25°C)

Characteristics		Symbol	Rating	Unit
Input voltage	TA79005S	V_{IN}	−35	V
	TA79006S			
	TA79007S			
	TA79008S			
	TA79009S			
	TA79010S			
	TA79012S			
	TA79015S			
	TA79018S		−40	
	TA79020S			
	TA79024S			
Power dissipation	(Ta = 25°C)	P_D	2	W
	(Tc = 25°C)		20	
Operating temperature		T_{opr}	−30~85	°C
Storage temperature		T_{stg}	−55~150	°C
Junction temperature		T_j	150	°C
Thermal resistance		$R_{th\ (j\text{-}c)}$	6.25	°C/W
		$R_{th\ (j\text{-}a)}$	62.5	

Note: Using continuously under heavy loads (e.g. the application of high temperature/current/voltage and the significant change in temperature, etc.) may cause this product to decrease in the reliability significantly even if the operating conditions (i.e. operating temperature/current/voltage, etc.) are within the absolute maximum ratings and the operating ranges.
Please design the appropriate reliability upon reviewing the Toshiba Semiconductor Reliability Handbook (“Handling Precautions”/Derating Concept and Methods) and individual reliability data (i.e. reliability test report and estimated failure rate, etc).

TA79005S
Electrical Characteristics
(Unless otherwise specified, V_{IN} = −10 V, I_{OUT} = 500 mA, 0°C ≤ T_j ≤ 125°C, C_{IN} = 0.33 μF, C_{OUT} = 0.1 μF)

Characteristics		Symbol	Test Circuit	Test Condition		Min	Typ.	Max	Unit
Output voltage		V_{OUT}	1	T_j = 25°C		−5.2	−5.0	−4.8	V
Line regulation		Reg·line	1	T_j = 25°C	−12 V ≤ V_{IN} ≤ −8 V	—	7	50	mV
					−25 V ≤ V_{IN} ≤ −7 V	—	35	100	
Load regulation		Reg·load	1	T_j = 25°C	5 mA ≤ I_{OUT} ≤ 1.5 A	—	11	100	mV
					250 mA ≤ I_{OUT} ≤ 750 mA	—	4	50	
Output voltage		V_{OUT}	1	T_j = 25°C	−20 V ≤ V_{IN} ≤ −7 V, 5 mA ≤ I_{OUT} ≤ 1.0 A	−5.25	—	−4.75	V
Quiescent current		I_B	1	T_j = 25°C		—	4.3	8.0	mA
Quiescent current change	Line	ΔI_B	1	T_j = 25°C	−25 V ≤ V_{IN} ≤ −7 V	—	—	1.3	mA
	Load		1		5 mA ≤ I_{OUT} ≤ 1.0 A	—	—	0.5	
Output noise voltage		V_{NO}	2	Ta = 25°C, I_{OUT} = 20 mA, 10 Hz ≤ f ≤ 100 kHz		—	40	—	μV_{rms}
Ripple rejection		R.R.	3	f = 120 Hz, I_{OUT} = 20 mA, T_j = 25°C		63	70	—	dB
Short circuit current limit		I_{SC}	1	T_j = 25°C		—	1.9	—	A
Dropout voltage		V_D	1	T_j = 25°C, I_{OUT} = 1.0 A		—	2.0	—	V
Average temperature coefficient of output voltage		T_{CVO}	1	I_{OUT} = 5.0 mA		—	0.6	—	mV/°C

TA79006S
Electrical Characteristics
(Unless otherwise specified, V_{IN} = −11 V, I_{OUT} = 500 mA, 0°C ≤ T_j ≤ 125°C, C_{IN} = 0.33 μF, C_{OUT} = 0.1 μF)

Characteristics		Symbol	Test Circuit	Test Condition		Min	Typ.	Max	Unit
Output voltage		V_{OUT}	1	T_j = 25°C		−6.25	−6.0	−5.75	V
Line regulation		Reg·line	1	T_j = 25°C	−13 V ≤ V_{IN} ≤ −9 V	—	9	60	mV
					−25 V ≤ V_{IN} ≤ −8 V	—	43	120	
Load regulation		Reg·load	1	T_j = 25°C	5 mA ≤ I_{OUT} ≤ 1.5 A	—	13	120	mV
					250 mA ≤ I_{OUT} ≤ 750 mA	—	5	60	
Output voltage		V_{OUT}	1	T_j = 25°C	−21 V ≤ V_{IN} ≤ −8 V, 5 mA ≤ I_{OUT} ≤ 1.0 A	−6.3	—	−5.7	V
Quiescent current		I_B	1	T_j = 25°C		—	4.3	8.0	mA
Quiescent current change	Line	ΔI_B	1	T_j = 25°C	−25 V ≤ V_{IN} ≤ −8 V	—	—	1.3	mA
	Load		1		5 mA ≤ I_{OUT} ≤ 1.0 A	—	—	0.5	
Output noise voltage		V_{NO}	2	Ta = 25°C, I_{OUT} = 20 mA, 10 Hz ≤ f ≤ 100 kHz		—	45	—	μV_{rms}
Ripple rejection		R.R.	3	f = 120 Hz, I_{OUT} = 20 mA, T_j = 25°C		61	68	—	dB
Short circuit current limit		I_{SC}	1	T_j = 25°C		—	1.9	—	A
Dropout voltage		V_D	1	T_j = 25°C, I_{OUT} = 1.0 A		—	2.0	—	V
Average temperature coefficient of output voltage		T_{CVO}	1	I_{OUT} = 5.0 mA		—	0.7	—	mV/°C

TA79007S
Electrical Characteristics
(Unless otherwise specified, V_{IN} = −12 V, I_{OUT} = 500 mA, 0°C ≤ T_j ≤ 125°C, C_{IN} = 0.33 μF, C_{OUT} = 0.1 μF)

Characteristics		Symbol	Test Circuit	Test Condition		Min	Typ.	Max	Unit
Output voltage		V_{OUT}	1	T_j = 25°C		−7.28	−7.0	−6.72	V
Line regulation		Reg·line	1	T_j = 25°C	−15 V ≤ V_{IN} ≤ −10 V	—	10	70	mV
					−25 V ≤ V_{IN} ≤ −9 V	—	45	140	
Load regulation		Reg·load	1	T_j = 25°C	5 mA ≤ I_{OUT} ≤ 1.5 A	—	20	140	mV
					250 mA ≤ I_{OUT} ≤ 750 mA	—	7	70	
Output voltage		V_{OUT}	1	T_j = 25°C	−22 V ≤ V_{IN} ≤ −9 V, 5 mA ≤ I_{OUT} ≤ 1.0 A	−7.35	—	−6.65	V
Quiescent current		I_B	1	T_j = 25°C		—	4.3	8.0	mA
Quiescent current change	Line	ΔI_B	1	T_j = 25°C	−25 V ≤ V_{IN} ≤ −9 V	—	—	1.0	mA
	Load		1		5 mA ≤ I_{OUT} ≤ 1.0 A	—	—	0.5	
Output noise voltage		V_{NO}	2	Ta = 25°C, I_{OUT} = 20 mA, 10 Hz ≤ f ≤ 100 kHz		—	49	—	μV_{rms}
Ripple rejection		R.R.	3	f = 120 Hz, I_{OUT} = 20 mA, T_j = 25°C		60	67	—	dB
Short circuit current limit		I_{SC}	1	T_j = 25°C		—	1.9	—	A
Dropout voltage		V_D	1	T_j = 25°C, I_{OUT} = 1.0 A		—	2.0	—	V
Average temperature coefficient of output voltage		T_{CVO}	1	I_{OUT} = 5.0 mA		—	0.9	—	mV/°C

TA79008S
Electrical Characteristics
(Unless otherwise specified, V_{IN} = −14 V, I_{OUT} = 500 mA, 0°C ≤ T_j ≤ 125°C, C_{IN} = 0.33 μF, C_{OUT} = 0.1 μF)

Characteristics		Symbol	Test Circuit	Test Condition		Min	Typ.	Max	Unit
Output voltage		V_{OUT}	1	T_j = 25°C		−8.3	−8.0	−7.7	V
Line regulation		Reg·line	1	T_j = 25°C	−17 V ≤ V_{IN} ≤ −11 V	—	11	80	mV
					−25 V ≤ V_{IN} ≤ −10.5 V	—	47	160	
Load regulation		Reg·load	1	T_j = 25°C	5 mA ≤ I_{OUT} ≤ 1.5 A	—	26	160	mV
					250 mA ≤ I_{OUT} ≤ 750 mA	—	9	80	
Output voltage		V_{OUT}	1	T_j = 25°C	−23 V ≤ V_{IN} ≤ −10.5 V, 5 mA ≤ I_{OUT} ≤ 1.0 A	−8.4	—	−7.6	V
Quiescent current		I_B	1	T_j = 25°C		—	4.3	8.0	mA
Quiescent current change	Line	ΔI_B	1	T_j = 25°C	−25 V ≤ V_{IN} ≤ −10.5 V	—	—	1.0	mA
	Load		1		5 mA ≤ I_{OUT} ≤ 1.0 A	—	—	0.5	
Output noise voltage		V_{NO}	2	Ta = 25°C, I_{OUT} = 20 mA, 10 Hz ≤ f ≤ 100 kHz		—	52	—	μV_{rms}
Ripple rejection		R.R.	3	f = 120 Hz, I_{OUT} = 20 mA, T_j = 25°C		59	66	—	dB
Short circuit current limit		I_{SC}	1	T_j = 25°C		—	1.9	—	A
Dropout voltage		V_D	1	T_j = 25°C, I_{OUT} = 1.0 A		—	2.0	—	V
Average temperature coefficient of output voltage		T_{CVO}	1	I_{OUT} = 5.0 mA		—	1.0	—	mV/°C

TA79009S
Electrical Characteristics
(Unless otherwise specified, V_{IN} = −15 V, I_{OUT} = 500 mA, 0°C ≤ T_j ≤ 125°C, C_{IN} = 0.33 μF, C_{OUT} = 0.1 μF)

Characteristics		Symbol	Test Circuit	Test Condition		Min	Typ.	Max	Unit
Output voltage		V_{OUT}	1	T_j = 25°C		−9.3	−9.0	−8.7	V
Line regulation		Reg·line	1	T_j = 25°C	−19 V ≤ V_{IN} ≤ −13 V	—	11	82	mV
					−26 V ≤ V_{IN} ≤ −11.5 V	—	48	162	
Load regulation		Reg·load	1	T_j = 25°C	5 mA ≤ I_{OUT} ≤ 1.5 A	—	33	162	mV
					250 mA ≤ I_{OUT} ≤ 750 mA	—	11	82	
Output voltage		V_{OUT}	1	T_j = 25°C	−24 V ≤ V_{IN} ≤ −11.5 V, 5 mA ≤ I_{OUT} ≤ 1.0 A	−9.4	—	−8.6	V
Quiescent current		I_B	1	T_j = 25°C		—	4.3	8.0	mA
Quiescent current change	Line	ΔI_B	1	T_j = 25°C	−26.5 V ≤ V_{IN} ≤ −13 V	—	—	1.0	mA
	Load		1		5 mA ≤ I_{OUT} ≤ 1.0 A	—	—	0.5	
Output noise voltage		V_{NO}	2	Ta = 25°C, I_{OUT} = 20 mA, 10 Hz ≤ f ≤ 100 kHz		—	60	—	μV_{rms}
Ripple rejection		R.R.	3	f = 120 Hz, I_{OUT} = 20 mA, T_j = 25°C		57	64	—	dB
Short circuit current limit		I_{SC}	1	T_j = 25°C		—	1.9	—	A
Dropout voltage		V_D	1	T_j = 25°C, I_{OUT} = 1.0 A		—	2.0	—	V
Average temperature coefficient of output voltage		T_{CVO}	1	I_{OUT} = 5.0 mA		—	1.1	—	mV/°C

TA79010S
Electrical Characteristics
(Unless otherwise specified, V_{IN} = −16 V, I_{OUT} = 500 mA, 0°C ≤ T_j ≤ 125°C, C_{IN} = 0.33 μF, C_{OUT} = 0.1 μF)

Characteristics		Symbol	Test Circuit	Test Condition		Min	Typ.	Max	Unit
Output voltage		V_{OUT}	1	T_j = 25°C		−10.4	−10.0	−9.6	V
Line regulation		Reg·line	1	T_j = 25°C	−20 V ≤ V_{IN} ≤ −14 V	—	12	90	mV
					−27 V ≤ V_{IN} ≤ −12.5 V	—	50	180	
Load regulation		Reg·load	1	T_j = 25°C	5 mA ≤ I_{OUT} ≤ 1.5 A	—	40	180	mV
					250 mA ≤ I_{OUT} ≤ 750 mA	—	13	90	
Output voltage		V_{OUT}	1	T_j = 25°C	−25 V ≤ V_{IN} ≤ −12.5 V, 5 mA ≤ I_{OUT} ≤ 1.0 A	−10.5	—	−9.5	V
Quiescent current		I_B	1	T_j = 25°C		—	4.4	8.0	mA
Quiescent current change	Line	ΔI_B	1	T_j = 25°C	−27.5 V ≤ V_{IN} ≤ −14 V	—	—	1.0	mA
	Load		1		5 mA ≤ I_{OUT} ≤ 1.0 A	—	—	0.5	
Output noise voltage		V_{NO}	2	Ta = 25°C, I_{OUT} = 20 mA, 10 Hz ≤ f ≤ 100 kHz		—	65	—	μV_{rms}
Ripple rejection		R.R.	3	f = 120 Hz, I_{OUT} = 20 mA, T_j = 25°C		57	63	—	dB
Short circuit current limit		I_{SC}	1	T_j = 25°C		—	1.9	—	A
Dropout voltage		V_D	1	T_j = 25°C, I_{OUT} = 1.0 A		—	2.0	—	V
Average temperature coefficient of output voltage		T_{CVO}	1	I_{OUT} = 5.0 mA		—	1.3	—	mV/°C

TA79012S
Electrical Characteristics
(Unless otherwise specified, V_{IN} = −19 V, I_{OUT} = 500 mA, 0°C ≤ T_j ≤ 125°C, C_{IN} = 0.33 μF, C_{OUT} = 0.1 μF)

Characteristics		Symbol	Test Circuit	Test Condition		Min	Typ.	Max	Unit
Output voltage		V_{OUT}	1	T_j = 25°C		−12.5	−12.0	−11.5	V
Line regulation		Reg·line	1	T_j = 25°C	−22 V ≤ V_{IN} ≤ −16 V	—	13	120	mV
					−30 V ≤ V_{IN} ≤ −14.5 V	—	55	240	
Load regulation		Reg·load	1	T_j = 25°C	5 mA ≤ I_{OUT} ≤ 1.5 A	—	46	240	mV
					250 mA ≤ I_{OUT} ≤ 750 mA	—	17	120	
Output voltage		V_{OUT}	1	T_j = 25°C	−27 V ≤ V_{IN} ≤ −14.5 V, 5 mA ≤ I_{OUT} ≤ 1.0 A	−12.6	—	−11.4	V
Quiescent current		I_B	1	T_j = 25°C		—	4.4	8.0	mA
Quiescent current change	Line	ΔI_B	1	T_j = 25°C	−30 V ≤ V_{IN} ≤ −14.5 V	—	—	1.0	mA
	Load		1		5 mA ≤ I_{OUT} ≤ 1.0 A	—	—	0.5	
Output noise voltage		V_{NO}	2	Ta = 25°C, I_{OUT} = 20 mA, 10 Hz ≤ f ≤ 100 kHz		—	75	—	μV_{rms}
Ripple rejection		R.R.	3	f = 120 Hz, I_{OUT} = 20 mA, T_j = 25°C		54	61	—	dB
Short circuit current limit		I_{SC}	1	T_j = 25°C		—	1.9	—	A
Dropout voltage		V_D	1	T_j = 25°C, I_{OUT} = 1.0 A		—	2.0	—	V
Average temperature coefficient of output voltage		T_{CVO}	1	I_{OUT} = 5.0 mA		—	1.6	—	mV/°C

TA79015S
Electrical Characteristics
(Unless otherwise specified, V_{IN} = −23 V, I_{OUT} = 500 mA, 0°C ≤ T_j ≤ 125°C, C_{IN} = 0.33 μF, C_{OUT} = 0.1 μF)

Characteristics		Symbol	Test Circuit	Test Condition		Min	Typ.	Max	Unit
Output voltage		V_{OUT}	1	T_j = 25°C		−15.6	−15.0	−14.4	V
Line regulation		Reg·line	1	T_j = 25°C	−26 V ≤ V_{IN} ≤ −20 V	—	14	150	mV
					−30 V ≤ V_{IN} ≤ −17.5 V	—	57	300	
Load regulation		Reg·load	1	T_j = 25°C	5 mA ≤ I_{OUT} ≤ 1.5 A	—	68	300	mV
					250 mA ≤ I_{OUT} ≤ 750 mA	—	25	150	
Output voltage		V_{OUT}	1	T_j = 25°C	−30 V ≤ V_{IN} ≤ −17.5 V, 5 mA ≤ I_{OUT} ≤ 1.0 A	−15.75	—	−14.25	V
Quiescent current		I_B	1	T_j = 25°C		—	4.4	8.0	mA
Quiescent current change	Line	ΔI_B	1	T_j = 25°C	−30 V ≤ V_{IN} ≤ −17.5 V	—	—	1.0	mA
	Load		1		5 mA ≤ I_{OUT} ≤ 1.0 A	—	—	0.5	
Output noise voltage		V_{NO}	2	Ta = 25°C, I_{OUT} = 20 mA, 10 Hz ≤ f ≤ 100 kHz		—	90	—	μV_{rms}
Ripple rejection		R.R.	3	f = 120 Hz, I_{OUT} = 20 mA, T_j = 25°C		53	60	—	dB
Short circuit current limit		I_{SC}	1	T_j = 25°C		—	1.9	—	A
Dropout voltage		V_D	1	T_j = 25°C, I_{OUT} = 1.0 A		—	2.0	—	V
Average temperature coefficient of output voltage		T_{CVO}	1	I_{OUT} = 5.0 mA		—	2.0	—	mV/°C

TA79018S
Electrical Characteristics
(Unless otherwise specified, V_{IN} = −27 V, I_{OUT} = 500 mA, 0°C ≤ T_j ≤ 125°C, C_{IN} = 0.33 μF, C_{OUT} = 0.1 μF)

Characteristics		Symbol	Test Circuit	Test Condition		Min	Typ.	Max	Unit
Output voltage		V_{OUT}	1	T_j = 25°C		−18.7	−18.0	−17.3	V
Line regulation		Reg·line	1	T_j = 25°C	−30 V ≤ V_{IN} ≤ −24 V	—	25	180	mV
					−33 V ≤ V_{IN} ≤ −21 V	—	80	360	
Load regulation		Reg·load	1	T_j = 25°C	5 mA ≤ I_{OUT} ≤ 1.5 A	—	110	360	mV
					250 mA ≤ I_{OUT} ≤ 750 mA	—	55	180	
Output voltage		V_{OUT}	1	T_j = 25°C	−33 V ≤ V_{IN} ≤ −21 V, 5 mA ≤ I_{OUT} ≤ 1.0 A	−18.85	—	−17.15	V
Quiescent current		I_B	1	T_j = 25°C		—	4.5	8.0	mA
Quiescent current change	Line	ΔI_B	1	T_j = 25°C	−33 V ≤ V_{IN} ≤ −21 V	—	—	1.0	mA
	Load		1		5 mA ≤ I_{OUT} ≤ 1.0 A	—	—	0.5	
Output noise voltage		V_{NO}	2	Ta = 25°C, I_{OUT} = 20 mA, 10 Hz ≤ f ≤ 100 kHz		—	110	—	μV_{rms}
Ripple rejection		R.R.	3	f = 120 Hz, I_{OUT} = 20 mA, T_j = 25°C		52	59	—	dB
Short circuit current limit		I_{SC}	1	T_j = 25°C		—	1.9	—	A
Dropout voltage		V_D	1	T_j = 25°C, I_{OUT} = 1.0 A		—	2.0	—	V
Average temperature coefficient of output voltage		T_{CVO}	1	I_{OUT} = 5.0 mA		—	2.5	—	mV/°C

TA79020S
Electrical Characteristics
(Unless otherwise specified, V_{IN} = −30 V, I_{OUT} = 500 mA, 0°C ≤ T_j ≤ 125°C, C_{IN} = 0.33 μF, C_{OUT} = 0.1 μF)

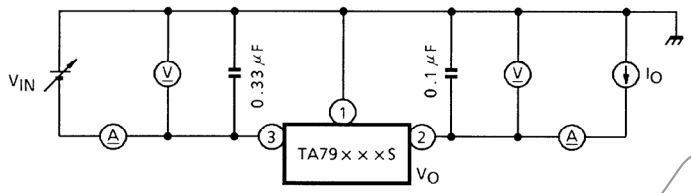
Characteristics		Symbol	Test Circuit	Test Condition		Min	Typ.	Max	Unit
Output voltage		V_{OUT}	1	T_j = 25°C		−20.8	−20.0	−19.2	V
Line regulation		Reg·line	1	T_j = 25°C	−32 V ≤ V_{IN} ≤ −26 V	—	28	180	mV
					−35 V ≤ V_{IN} ≤ −24 V	—	104	360	
Load regulation		Reg·load	1	T_j = 25°C	5 mA ≤ I_{OUT} ≤ 1.5 A	—	130	360	mV
					250 mA ≤ I_{OUT} ≤ 750 mA	—	70	180	
Output voltage		V_{OUT}	1	T_j = 25°C	−35 V ≤ V_{IN} ≤ −24 V, 5 mA ≤ I_{OUT} ≤ 1.0 A	−21.0	—	−19.0	V
Quiescent current		I_B	1	T_j = 25°C		—	4.6	8.0	mA
Quiescent current change	Line	ΔI_B	1	T_j = 25°C	−36.5 V ≤ V_{IN} ≤ −25 V	—	—	1.0	mA
	Load		1		5 mA ≤ I_{OUT} ≤ 1.0 A	—	—	0.5	
Output noise voltage		V_{NO}	2	Ta = 25°C, I_{OUT} = 20 mA, 10 Hz ≤ f ≤ 100 kHz		—	140	—	μV_{rms}
Ripple rejection		R.R.	3	f = 120 Hz, I_{OUT} = 20 mA, T_j = 25°C		50	57	—	dB
Short circuit current limit		I_{SC}	1	T_j = 25°C		—	1.9	—	A
Dropout voltage		V_D	1	T_j = 25°C, I_{OUT} = 1.0 A		—	2.0	—	V
Average temperature coefficient of output voltage		T_{CVO}	1	I_{OUT} = 5.0 mA		—	3.0	—	mV/°C

TA79024S
Electrical Characteristics
(Unless otherwise specified, V_{IN} = −33 V, I_{OUT} = 500 mA, 0°C ≤ T_j ≤ 125°C, C_{IN} = 0.33 μF, C_{OUT} = 0.1 μF)

Characteristics		Symbol	Test Circuit	Test Condition		Min	Typ.	Max	Unit
Output voltage		V_{OUT}	1	T_j = 25°C		−25.0	−24.0	−23.0	V
Line regulation		Reg·line	1	T_j = 25°C	−36 V ≤ V_{IN} ≤ −30 V	—	31	240	mV
					−38 V ≤ V_{IN} ≤ −27 V	—	118	480	
Load regulation		Reg·load	1	T_j = 25°C	5 mA ≤ I_{OUT} ≤ 1.5 A	—	150	480	mV
					250 mA ≤ I_{OUT} ≤ 750 mA	—	85	240	
Output voltage		V_{OUT}	1	T_j = 25°C	−38 V ≤ V_{IN} ≤ −27 V, 5 mA ≤ I_{OUT} ≤ 1.0 A	−25.2	—	−22.8	V
Quiescent current		I_B	1	T_j = 25°C		—	4.6	8.0	mA
Quiescent current change	Line	ΔI_B	1	T_j = 25°C	−38 V ≤ V_{IN} ≤ −27 V	—	—	1.0	mA
	Load		1		5 mA ≤ I_{OUT} ≤ 1.0 A	—	—	0.5	
Output noise voltage		V_{NO}	2	Ta = 25°C, I_{OUT} = 20 mA, 10 Hz ≤ f ≤ 100 kHz		—	170	—	μV_{rms}
Ripple rejection		R.R.	3	f = 120 Hz, I_{OUT} = 20 mA, T_j = 25°C		49	56	—	dB
Short circuit current limit		I_{SC}	1	T_j = 25°C		—	1.9	—	A
Dropout voltage		V_D	1	T_j = 25°C, I_{OUT} = 1.0 A		—	2.0	—	V
Average temperature coefficient of output voltage		T_{CVO}	1	I_{OUT} = 5.0 mA		—	3.5	—	mV/°C

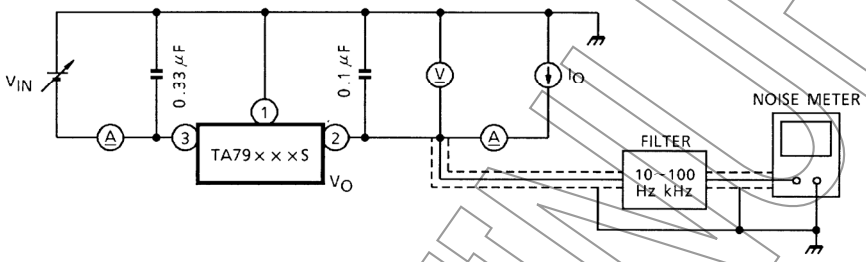
Test Circuit 1

V_{OUT}, Reg·line, Reg·load, I_B, ΔI_B, V_D, T_{CVO}



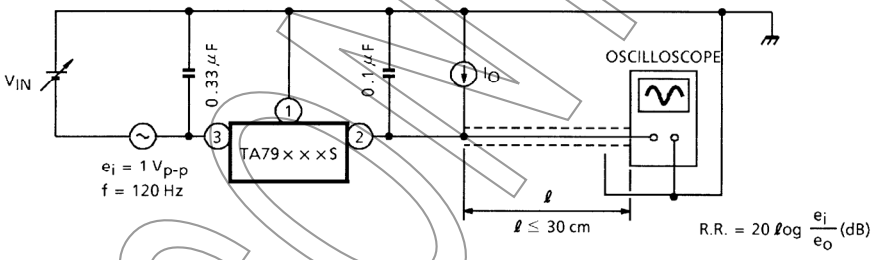
Test Circuit 2

V_{NO}

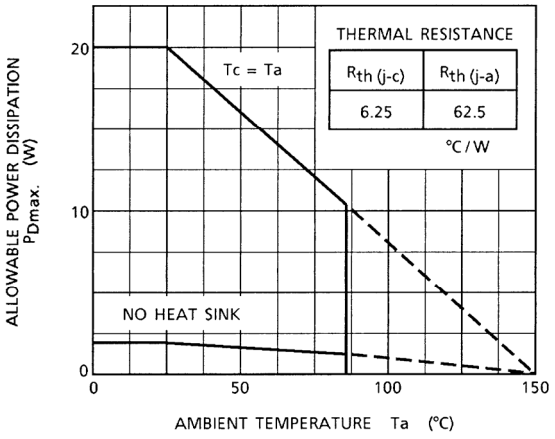


Test Circuit 3

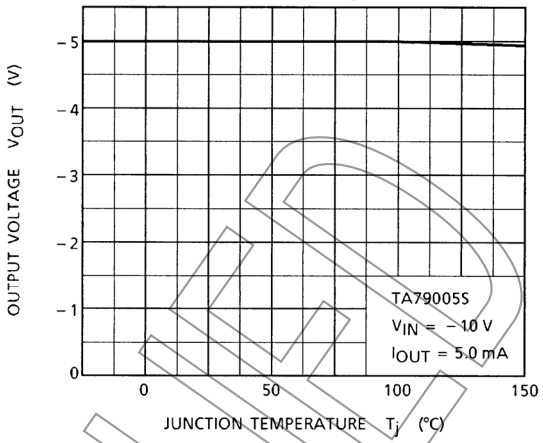
R.R.



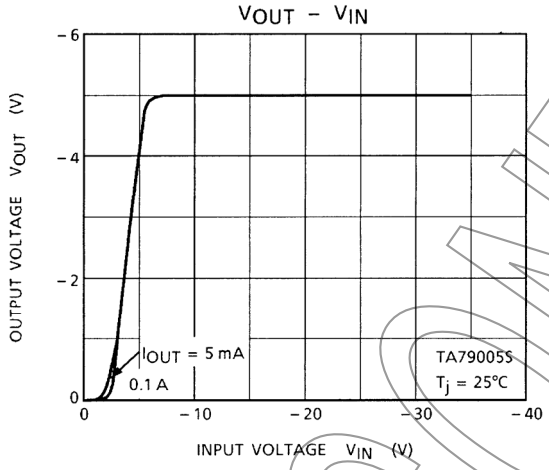
$P_{Dmax.}$ – Ta



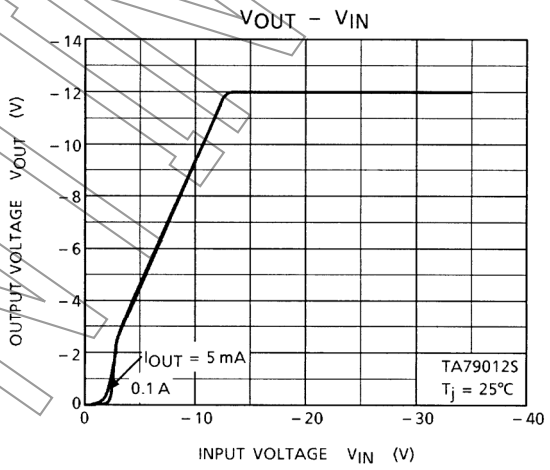
V_{OUT} – T_j



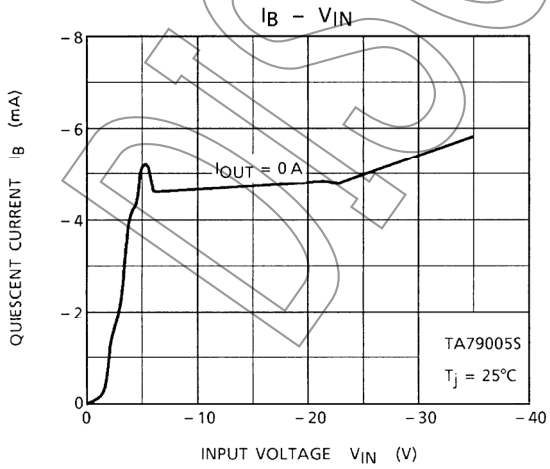
V_{OUT} – V_{IN}



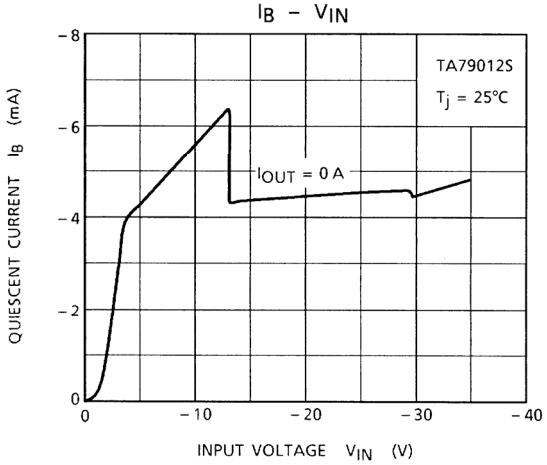
V_{OUT} – V_{IN}



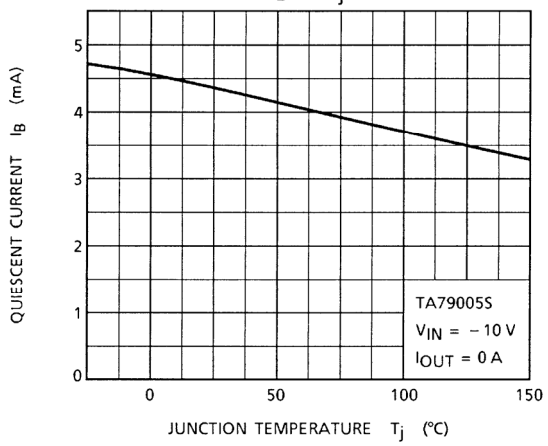
I_B – V_{IN}



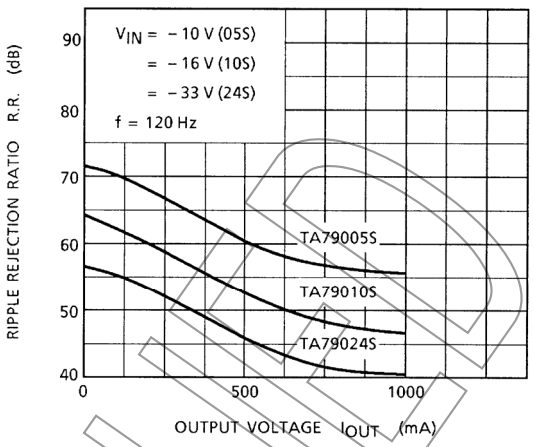
I_B – V_{IN}



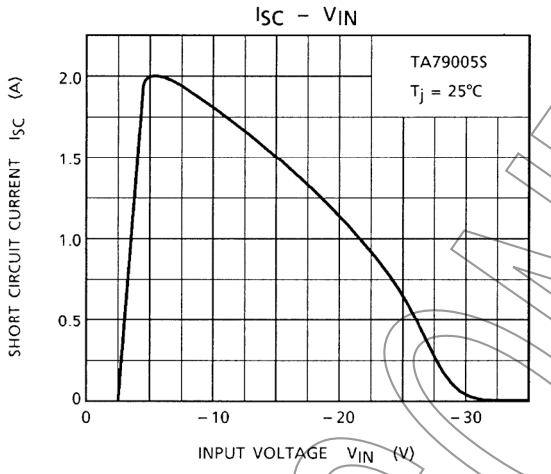
$I_B - T_j$



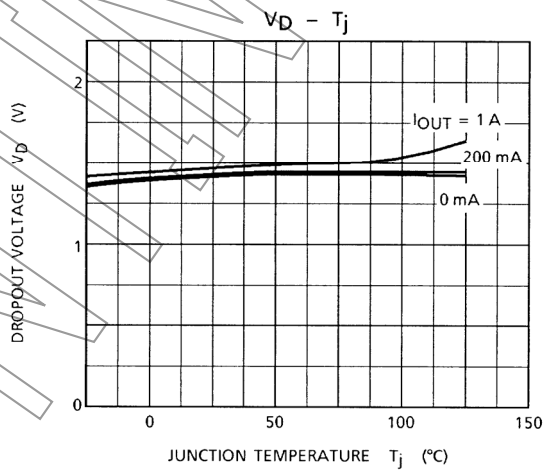
R.R. − I_{OUT}



$I_{SC} - V_{IN}$

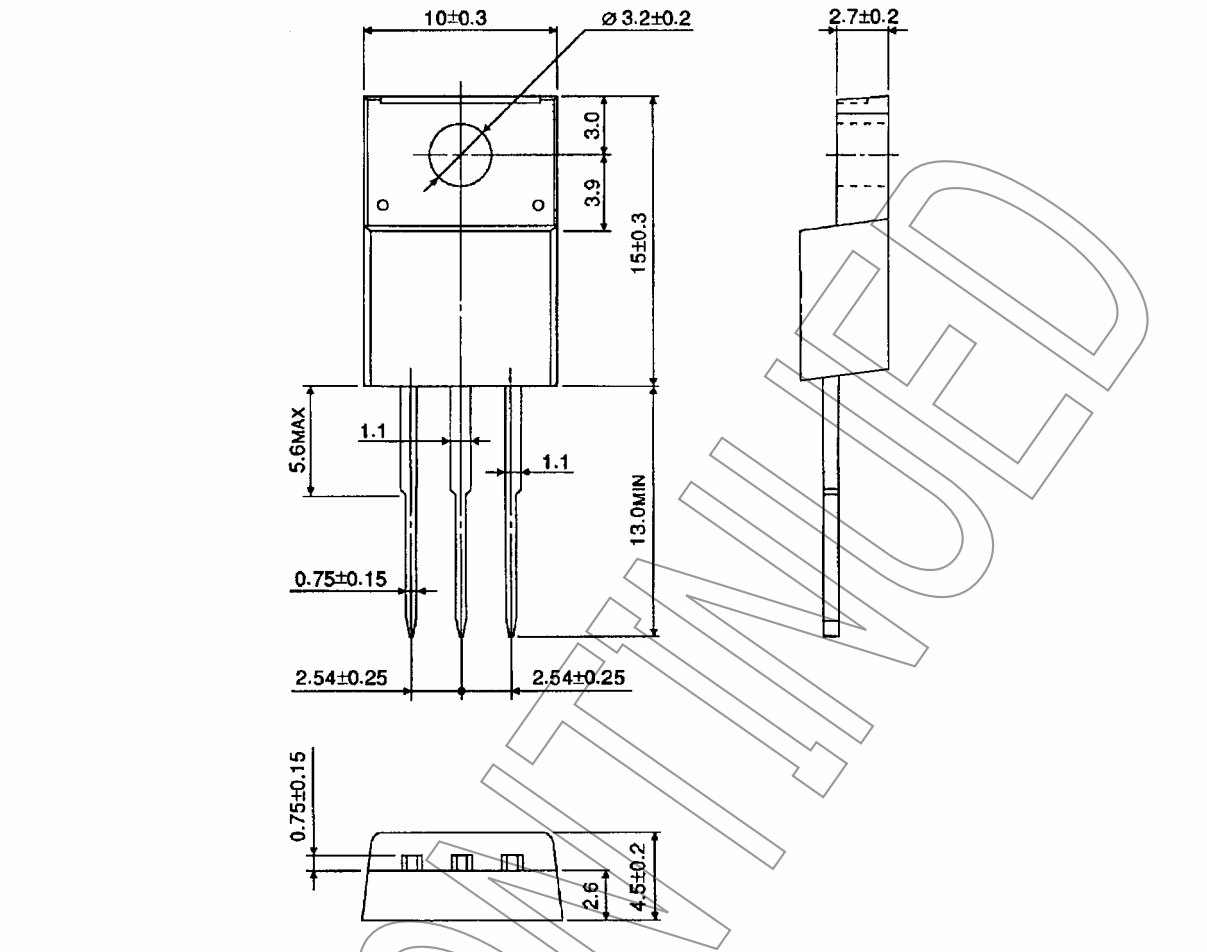


$V_D - T_j$



Package Dimensions

HSIP3-P-2.54A Unit: mm



Weight: 1.7 g (typ.)

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20070701-EN

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