

6427525 N E C ELECTRONICS INC

05E 22528 D

BIPOLAR ANALOG INTEGRATED CIRCUITS

 μ PC7800H SERIES

T-58-11-13

THREE TERMINAL POSITIVE VOLTAGE REGULATORS

DESCRIPTION

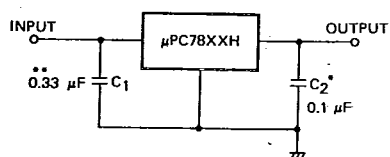
The μ PC7800H series are monolithic three terminal positive regulators which employ internally current limiting, thermal shut down, and safe-area compensation, make them essentially indestructible.

They are intended as fixed-voltage regulators in a wide range of application including local on card regulation for elimination of distribution problems associated with single point regulation.

FEATURES

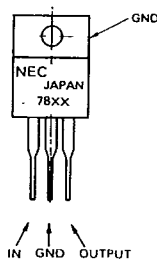
- Output current in excess of 1 A
- No external component required
- Internal thermal overload protection

TYPICAL APPLICATION

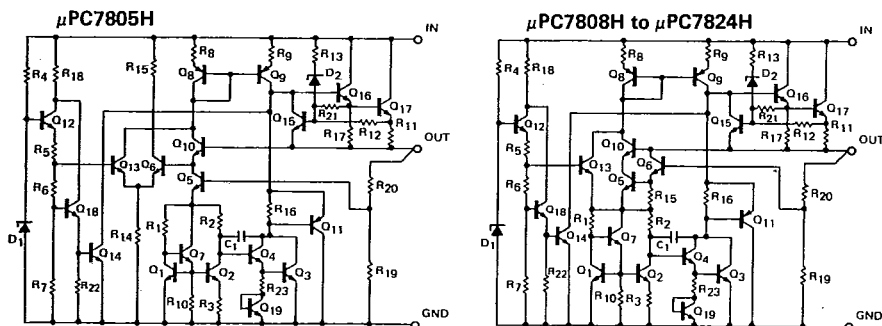


Notes: C_1 & C_2 are required if regulator is located an appreciable distance from power supply filter and load. Also C_2 improve transient response. The wire length of IC to C_1 or C_2 must be shorter than 20 mm.

CONNECTION DIAGRAM



EQUIVALENT CIRCUIT



μPC7800H SERIES
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05E 22529 D

T-58-11-13

μPC7805H

ABSOLUTE MAXIMUM RATINGS

Input Voltage	V_{IN}	35	V
Internal Power Dissipation	$P_T (T_C=25^\circ\text{C})$	20 note	W
Operating Ambient Temperature Range	T_{opt}	-20 to +80	$^\circ\text{C}$
Operating Junction Temperature Range	$T_{opt(j)}$	-20 to +150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 to +150	$^\circ\text{C}$
Thermal Resistance (Junction to Case)	$R_{th(j-c)}$	4	$^\circ\text{C/W}$
Thermal Resistance (Junction to Ambient)	$R_{th(j-a)}$	83	$^\circ\text{C/W}$

Note: Internally Limited
 When junction temperature rises up to 150°C the internal circuit shutdown output voltage.

RECOMMENDED OPERATING CONDITIONS

ITEM	SYMBOL	MIN.	TYP.	MAX.	UNIT
Input Voltage	V_{IN}	7	10	25	V
Output Current	I_O	0.005	0.5	1	A
Operating Junction Temperature Range	$T_{opt(j)}$	-20		+125	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($V_{IN}=10\text{ V}$, $I_O=500\text{ mA}$, $0^\circ\text{C} \leq T_J \leq +125^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITON
Output Voltage	V_O	4.8	5.0	5.2	V	$T_J=25^\circ\text{C}$
		4.75		5.25		$7\text{ V} \leq V_{IN} \leq 20\text{ V}$, $5\text{ mA} \leq I_O \leq 1.0\text{ A}$, $P_T \leq 15\text{ W}$
Line Regulation	REG_{IN}		15	100	mV	$T_J=25^\circ\text{C}$, $7\text{ V} \leq V_{IN} \leq 25\text{ V}$
			4	50		$T_J=25^\circ\text{C}$, $8\text{ V} \leq V_{IN} \leq 12\text{ V}$
Load Regulation	REG_L		4	100	mV	$T_J=25^\circ\text{C}$, $5\text{ mA} \leq I_O \leq 1.5\text{ A}$
			2	50		$T_J=25^\circ\text{C}$, $250\text{ mA} \leq I_O \leq 750\text{ mA}$
Quiescent Current	I_{BIAS}		5.3	8.0	mA	$T_J=25^\circ\text{C}$
Quiescent Current Change	ΔI_{BIAS}			1.3	mA	$7\text{ V} \leq V_{IN} \leq 25\text{ V}$
				0.5		$5\text{ mA} \leq I_O \leq 1.0\text{ A}$
Output Noise Voltage	V_n		40	200	$\mu\text{V}_{r.m.s.}$	$T_a=25^\circ\text{C}$, $10\text{ Hz} \leq f \leq 100\text{ kHz}$
Ripple Rejection	RR	62	69		dB	$f=120\text{ Hz}$, $8\text{ V} \leq V_{IN} \leq 18\text{ V}$
Dropout Voltage	V_{DIF}		1.8		V	$T_J=25^\circ\text{C}$, $I_O=1.0\text{ A}$
Short Circuit Current	I_{short}		1.1		A	$T_J=25^\circ\text{C}$, $V_{IN}=25\text{ V}$
Peak Output Current	I_{peak}	1.7	2.2	2.8	A	$T_J=25^\circ\text{C}$, $V_{IN}=10\text{ V}$
Temperature Coefficient of Output Voltage	$\Delta V_O/\Delta T$		0.4		$\text{mV}/^\circ\text{C}$	$I_O=5\text{ mA}$, $0^\circ\text{C} \leq T_J \leq +125^\circ\text{C}$

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 μ PC7800H SERIES
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ABSOLUTE MAXIMUM RATINGS

Input Voltage	V_{IN}	35	V
Internal Power Dissipation	$P_T(T_C=25^\circ\text{C})$	20 note	W
Operating Ambient Temperature Range	T_{opt}	-20 to +80	$^\circ\text{C}$
Operating Junction Temperature Range	$T_{opt(j)}$	-20 to +150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 to +150	$^\circ\text{C}$
Thermal Resistance (Junction Case)	$R_{th(j-c)}$	4	$^\circ\text{C/W}$
Thermal Resistance (Junction to Ambient)	$R_{th(j-a)}$	83	$^\circ\text{C/W}$

Note: Internally Limited

When function temperature rises up to 150°C the internal circuit shutdown output voltage.

RECOMMENDED OPERATING CONDITIONS

ITEM	SYMBOL	MIN.	TYP.	MAX.	UNIT
Input Voltage	V_{IN}	10.5	14	25	V
Output Current	I_O	0.005	0.5	1	A
Operating Junction Temperature Range	$T_{opt(j)}$	-20		+125	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($V_{IN}=14\text{ V}$, $I_O=500\text{ mA}$, $0^\circ\text{C} \leq T_j \leq +125^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Output Voltage	V_O	7.7	8.0	8.3	V	$T_j=25^\circ\text{C}$
		7.6		8.4		$10.5\text{ V} \leq V_{IN} \leq 23\text{ V}$, $5\text{ mA} \leq I_O \leq 1.0\text{ A}$, $P_T \leq 15\text{ W}$
Line Regulation	REG_{IN}		34	160	mV	$T_j=25^\circ\text{C}$, $10.5\text{ V} \leq V_{IN} \leq 25\text{ V}$
			18	80		$T_j=25^\circ\text{C}$, $11\text{ V} \leq V_{IN} \leq 17\text{ V}$
Load Regulation	REG_L		24	160	mV	$T_j=25^\circ\text{C}$, $5\text{ mA} \leq I_O \leq 1.5\text{ A}$
			8	80		$T_j=25^\circ\text{C}$, $250\text{ mA} \leq I_O \leq 750\text{ mA}$
Quiescent Current	I_{BIAS}		4.7	8.0	mA	$T_j=25^\circ\text{C}$
Quiescent Current Change	ΔI_{BIAS}			1.0	mA	$10.5\text{ V} \leq V_{IN} \leq 25\text{ V}$
				0.5		$5\text{ mA} \leq I_O \leq 1.0\text{ A}$
Output Noise Voltage	V_n		50	250	$\mu\text{V}_{r.m.s.}$	$T_A=25^\circ\text{C}$, $10\text{ Hz} \leq f \leq 100\text{ kHz}$
Ripple Rejection	RR	56	63		dB	$f=120\text{ Hz}$, $11.5\text{ V} \leq V_{IN} \leq 21.5\text{ V}$
Dropout Voltage	V_{DJF}		1.8		V	$T_j=25^\circ\text{C}$, $I_O=1.0\text{ A}$
Short Circuit Current	I_{short}		1.0		A	$T_j=25^\circ\text{C}$, $V_{IN}=25\text{ V}$
Peak Output Current	I_{peak}	1.7	2.3	2.8	A	$T_j=25^\circ\text{C}$, $V_{IN}=14\text{ V}$
Temperature Coefficient of Output Voltage	$\Delta V_O/\Delta T$		0.4		mV/ $^\circ\text{C}$	$I_O=5\text{ mA}$, $0^\circ\text{C} \leq T_j \leq +125^\circ\text{C}$

μPC7800H SERIES

6427525 N E C ELECTRONICS INC

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μPC7812H

*T-58-11-13***ABSOLUTE MAXIMUM RATINGS**

Input Voltage	V_{IN}	35	V
Internal Power Dissipation	$P_T(T_C=25^\circ\text{C})$	20 note	W
Operating Ambient Temperature Range	T_{opt}	-20 to +80	$^\circ\text{C}$
Operating Junction Temperature Range	$T_{opt(j)}$	-20 to +150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 to +150	$^\circ\text{C}$
Thermal Resistance (Junction to Case)	$R_{th(j-c)}$	4	$^\circ\text{C/W}$
Thermal Resistance (Junction to Ambient)	$R_{th(j-a)}$	83	$^\circ\text{C/W}$

Note: Internally Limited

When junction temperature rises up to 150°C the internal circuit shutdown output voltage.**RECOMMENDED OPERATING CONDITIONS**

ITEM	SYMBOL	MIN.	TYP.	MAX.	UNIT
Input Voltage	V_{IN}	14.5	19	30	V
Output Current	I_O	0.005	0.5	1	A
Operating Junction Temperature Range	$T_{opt(j)}$	-20		+125	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($V_{IN}=19\text{ V}$, $I_O=500\text{ mA}$, $0^\circ\text{C} \leq T_J \leq +125^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Output Voltage	V_O	11.5	12.0	12.5	V	$T_J=25^\circ\text{C}$
		11.4		12.6		$14.5\text{ V} \leq V_{IN} \leq 27\text{ V}$, $5\text{ mA} \leq I_O \leq 1.0\text{ A}$, $P_T \leq 15\text{ W}$
Line Regulation	REG_{IN}		44	240	mV	$T_J=25^\circ\text{C}$, $14.5\text{ V} \leq V_{IN} \leq 30\text{ V}$
			16	120		$T_J=25^\circ\text{C}$, $16\text{ V} \leq V_{IN} \leq 22\text{ V}$
Load Regulation	REG_L		45	240	mV	$T_J=25^\circ\text{C}$, $5\text{ mA} \leq I_O \leq 1.5\text{ A}$
			16	120		$T_J=25^\circ\text{C}$, $250\text{ mA} \leq I_O \leq 750\text{ mA}$
Quiescent Current	I_{BIAS}		4.7	8.0	mA	$T_J=25^\circ\text{C}$
Quiescent Current Change	ΔI_{BIAS}			1.0	mA	$14.5\text{ V} \leq V_{IN} \leq 30\text{ V}$
				0.5		$5\text{ mA} \leq I_O \leq 1.0\text{ A}$
Output Noise Voltage	V_n		70	300	$\mu\text{Vr.m.s.}$	$T_J=25^\circ\text{C}$, $10\text{ Hz} \leq f \leq 100\text{ kHz}$
Ripple Rejection	RR	55	60		dB	$f=120\text{ Hz}$, $15\text{ V} \leq V_{IN} \leq 25\text{ V}$
Dropout Voltage	V_{DIF}		1.8		V	$T_J=25^\circ\text{C}$, $I_O=1.0\text{ A}$
Short Circuit Current	I_{oshort}		0.7		A	$T_J=25^\circ\text{C}$, $V_{IN}=30\text{ V}$
Peak Output Current	I_{opeak}	1.7	2.3	2.8	A	$T_J=25^\circ\text{C}$, $V_{IN}=19\text{ V}$
Temperature Coefficient of Output Voltage	$\Delta V_O/\Delta T$		0.8		mV/ $^\circ\text{C}$	$I_O=5\text{ mA}$, $0^\circ\text{C} \leq T_J \leq +125^\circ\text{C}$

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μPC7800H SERIES
05E 22532 D*T-58-11-13*

μPC7815H

ABSOLUTE MAXIMUM RATINGS

Input Voltage	V_{IN}	35	V
Internal Power Dissipation	$P_T(T_C=25^\circ\text{C})$	20 note	W
Operating Ambient Temperature Range	T_{opt}	-20 to +80	$^\circ\text{C}$
Operating Junction Temperature Range	$T_{opt(j)}$	-20 to +150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 to +150	$^\circ\text{C}$
Thermal Resistance (Junction to Case)	$R_{th(j-c)}$	4	$^\circ\text{C/W}$
Thermal Resistance (Junction to Ambient)	$R_{th(j-a)}$	83	$^\circ\text{C/W}$

Note: Internally Limited

When junction temperature rises up to 150°C the internal circuit shutdown output voltage.**RECOMMENDED OPERATING CONDITIONS**

ITEM	SYMBOL	MIN.	TYP.	MAX.	UNIT
Input Voltage	V_{IN}	17.5	23	30	V
Output Current	I_O	0.005	0.5	1	A
Operating Junction Temperature Range	$T_{opt(j)}$	-20		+125	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($V_{IN}=23\text{ V}$, $I_O=500\text{ mA}$, $0^\circ\text{C} \leq T_J \leq +125^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Output Voltage	V_O	14.4	15.0	15.6	V	$T_J=25^\circ\text{C}$
		14.25		15.75		$17.5\text{ V} \leq V_{IN} \leq 30\text{ V}$, $5\text{ mA} \leq I_O \leq 1.0\text{ A}$, $P_T \leq 15\text{ W}$
Line Regulation	REG_{IN}		46	300	mV	$T_J=25^\circ\text{C}$, $17.5\text{ V} \leq V_{IN} \leq 30\text{ V}$
			22	150		$T_J=25^\circ\text{C}$, $20\text{ V} \leq V_{IN} \leq 26\text{ V}$
Load Regulation	REG_L		66	300	mV	$T_J=25^\circ\text{C}$, $5\text{ mA} \leq I_O \leq 1.5\text{ A}$
			24	150		$T_J=25^\circ\text{C}$, $250\text{ mA} \leq I_O \leq 750\text{ mA}$
Quiescent Current	I_{BIAS}		4.7	8.0	mA	$T_J=25^\circ\text{C}$
Quiescent Current Change	ΔI_{BIAS}			1.0	mA	$17.5\text{ V} \leq V_{IN} \leq 30\text{ V}$
				0.5		$5\text{ mA} \leq I_O \leq 1.0\text{ A}$
Output Noise Voltage	V_n		85	400	$\mu\text{V}_{r.m.s.}$	$T_a=25^\circ\text{C}$, $10\text{ Hz} \leq f \leq 100\text{ kHz}$
Ripple Rejection	RR	54	58		dB	$f=120\text{ Hz}$, $18.5\text{ V} \leq V_{IN} \leq 28.5\text{ V}$
Dropout Voltage	V_{DIF}		1.8		V	$T_J=25^\circ\text{C}$, $I_O=1.0\text{ A}$
Short Circuit Current	I_{oshort}		0.7		A	$T_J=25^\circ\text{C}$, $V_{IN}=30\text{ V}$
Peak Output Current	I_{opeak}	1.7	2.3	2.8	A	$T_J=25^\circ\text{C}$, $V_{IN}=23\text{ V}$
Temperature Coefficient of Output Voltage	$\Delta V_O / \Delta T$		1.0		mV/ $^\circ\text{C}$	$I_O=5\text{ mA}$, $0^\circ\text{C} \leq T_J \leq +125^\circ\text{C}$

μPC7800H SERIES
6427525 N E C ELECTRONICS INC

05E 22533 D

*T-58-11-13***μPC7818H****ABSOLUTE MAXIMUM RATINGS**

Input Voltage	V_{IN}	35	V
Internal Power Dissipation	$P_T(T_C=25^\circ\text{C})$	20 note	W
Operating Ambient Temperature Range	T_{opt}	-20 to +80	$^\circ\text{C}$
Operating Junction Temperature Range	$T_{opt(j)}$	-20 to +150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 to +150	$^\circ\text{C}$
Thermal Resistance (Junction to Case)	$R_{th(j-c)}$	4	$^\circ\text{C/W}$
Thermal Resistance (Junction to Ambient)	$R_{th(j-a)}$	83	$^\circ\text{C/W}$

Note: Internally Limited

When junction temperature rises up to 150°C the internal circuit shutdown output voltage.**RECOMMENDED OPERATING CONDITIONS**

ITEM	SYMBOL	MIN.	TYP.	MAX.	UNIT
Input Voltage	V_{IN}	21	27	33	V
Output Current	I_O	0.005	0.5	1	A
Operating Junction Temperature Range	$T_{opt(j)}$	-20		+125	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($V_{IN}=27\text{ V}$, $I_O=500\text{ mA}$, $0^\circ\text{C} \leq T_J \leq +125^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Output Voltage	V_O	17.3	18.0	18.7	V	$T_J=25^\circ\text{C}$
		17.1		18.9		$21\text{ V} \leq V_{IN} \leq 33\text{ V}$, $5\text{ mA} \leq I_O \leq 1.0\text{ A}$, $P_T \leq 15\text{ W}$
Line Regulation	REG_{IN}		52	360	mV	$T_J=25^\circ\text{C}$, $21\text{ V} \leq V_{IN} \leq 33\text{ V}$
			26	180		$T_J=25^\circ\text{C}$, $24\text{ V} \leq V_{IN} \leq 30\text{ V}$
Load Regulation	REG_L		100	360	mV	$T_J=25^\circ\text{C}$, $5\text{ mA} \leq I_O \leq 1.5\text{ A}$
			32	180		$T_J=25^\circ\text{C}$, $250\text{ mA} \leq I_O \leq 750\text{ mA}$
Quiescent Current	I_{BIAS}	5.0	8.0		mA	$T_J=25^\circ\text{C}$
Quiescent Current Change	ΔI_{BIAS}			1.0	mA	$21\text{ V} \leq V_{IN} \leq 33\text{ V}$
				0.5		$5\text{ mA} \leq I_O \leq 1.0\text{ A}$
Output Noise Voltage	V_n		95	450	$\mu\text{V}_{r.m.s.}$	$T_a=25^\circ\text{C}$, $10\text{ Hz} \leq f \leq 100\text{ kHz}$
Ripple Rejection	RR	53	56		dB	$f=120\text{ Hz}$, $22\text{ V} \leq V_{IN} \leq 32\text{ V}$
Dropout Voltage	V_{DIF}		1.8		V	$T_J=25^\circ\text{C}$, $I_O=1.0\text{ A}$
Short Circuit Current	I_{oshort}		0.7		A	$T_J=25^\circ\text{C}$, $V_{IN}=33\text{ V}$
Peak Output Current	I_{opeak}	1.7	2.3	2.8	A	$T_J=25^\circ\text{C}$, $V_{IN}=27\text{ V}$
Temperature Coefficient of Output Voltage	$\Delta V_O/\Delta T$		1.2		mV/ $^\circ\text{C}$	$I_O=5\text{ mA}$, $0^\circ\text{C} \leq T_J \leq +125^\circ\text{C}$

6427525 N E C ELECTRONICS INC

 μ PC7800H SERIES
05E 22534 D

T-58-11-13

 μ PC7824H

ABSOLUTE MAXIMUM RATINGS

Input Voltage	V_{IN}	40	V
Internal Power Dissipation	$P_T(T_C=25^\circ\text{C})$	20 note	W
Operating Ambient Temperature Range	T_{opt}	-20 to +80	$^\circ\text{C}$
Operating Junction Temperature Range	$T_{opt(j)}$	-20 to +150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 to +150	$^\circ\text{C}$
Thermal Resistance (Junction to Case)	$R_{th(j-c)}$	4	$^\circ\text{C/W}$
Thermal Resistance (Junction to Ambient)	$R_{th(j-a)}$	83	$^\circ\text{C/W}$

Note: Internally Limited

When junction temperature rises up to 150°C the internal circuit shutdown output voltage.

RECOMMENDED OPERATING CONDITIONS

ITEM	SYMBOL	MIN.	TYP.	MAX.	UNIT
Input Voltage	V_{IN}	27	33	38	V
Output Current	I_O	0.005	0.5	1	A
Operating Junction Temperature Range	$T_{opt(j)}$	-20		+125	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($V_{IN}=33\text{ V}$, $I_O=500\text{ mA}$, $0^\circ\text{C} \leq T_J \leq +125^\circ\text{C}$)

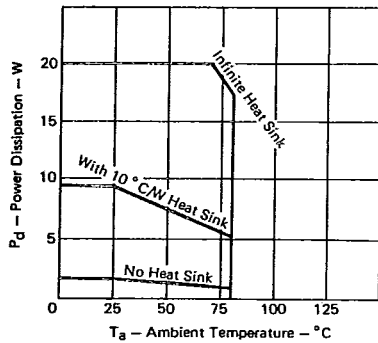
CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Output Voltage	V_O	23.0	24.0	25.0	V	$T_J=25^\circ\text{C}$
		22.8		25.2		$27\text{ V} \leq V_{IN} \leq 38\text{ V}$, $5\text{ mA} \leq I_O \leq 1.0\text{ A}$
Line Regulation	REG_{IN}		64	480	mV	$T_J=25^\circ\text{C}$, $27\text{ V} \leq V_{IN} \leq 38\text{ V}$
			34	240		$T_J=25^\circ\text{C}$, $30\text{ V} \leq V_{IN} \leq 36\text{ V}$
Load Regulation	REG_L		130	480	mV	$T_J=25^\circ\text{C}$, $5\text{ mA} \leq I_O \leq 1.5\text{ A}$
			44	240		$T_J=25^\circ\text{C}$, $250\text{ mA} \leq I_O \leq 750\text{ mA}$
Quiescent Current	I_{BIAS}		5.0	8.0	mA	$T_J=25^\circ\text{C}$
Quiescent Current Change	ΔI_{BIAS}			1.0	mA	$27\text{ V} \leq V_{IN} \leq 38\text{ V}$
				0.5		$5\text{ mA} \leq I_O \leq 1.0\text{ A}$
Output Noise Voltage	V_n		120	500	$\mu\text{V}_{r.m.s.}$	$T_a=25^\circ\text{C}$, $10\text{ Hz} \leq f \leq 100\text{ kHz}$
Ripple Rejection	RR	50	54		dB	$f=120\text{ Hz}$, $28\text{ V} \leq V_{IN} \leq 38\text{ V}$
Dropout Voltage	V_{DIF}		2.0		V	$T_J=25^\circ\text{C}$, $I_O=1.0\text{ A}$
Short Circuit Current	I_{short}		0.4		A	$T_J=25^\circ\text{C}$, $V_{IN}=38\text{ V}$
Peak Output Current	I_{peak}	1.7	2.4	2.8	A	$T_J=25^\circ\text{C}$, $V_{IN}=33\text{ V}$
Temperature Coefficient of Output Voltage	$\Delta V_O/\Delta T$		1.4		mV/ $^\circ\text{C}$	$I_O=5\text{ mA}$, $0^\circ\text{C} \leq T_J \leq +125^\circ\text{C}$

μPC7800H SERIES
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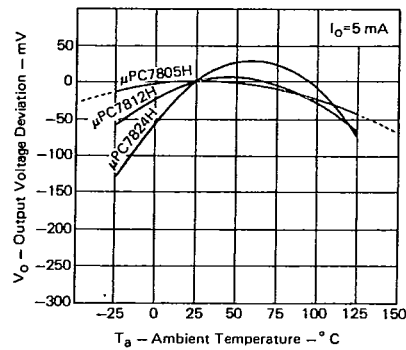
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TYPICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)*T-58-11-13*

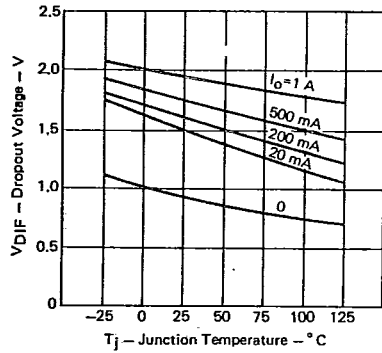
WORST CASE POWER DISSIPATION vs.
 AMBIENT TEMPERATURE



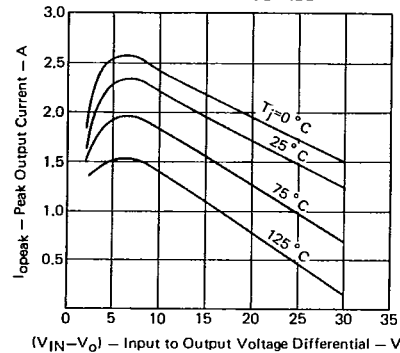
OUTPUT VOLTAGE vs. AMBIENT TEMPERATURE



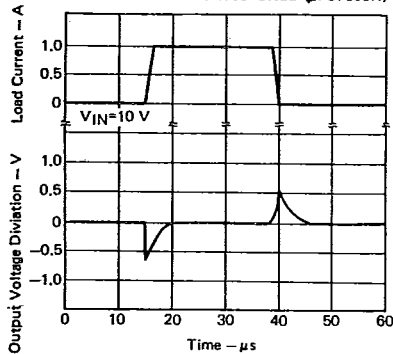
DROPOUT VOLTAGE AS A FUNCTION
 OF JUNCTION TEMPERATURE



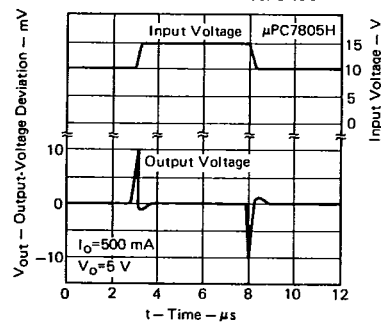
PEAK OUTPUT CURRENT AS
 A FUNCTION OF INPUT/OUTPUT
 DIFFERENTIAL VOLTAGE



LOAD TRANSIENT RESPONSE ($\mu\text{PC7805H}$)

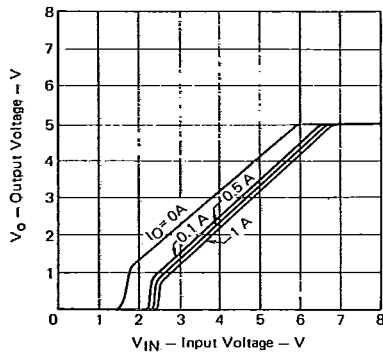


LINE TRANSIENT RESPONSE

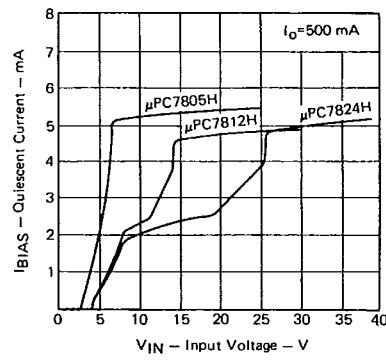


μ PC7800H SERIES
05E 22536 D

6427525 N E C ELECTRONICS INC

*T-58-11-13*DROPOUT CHARACTERISTICS (μ PC7805H)

QUIESCENT CURRENT



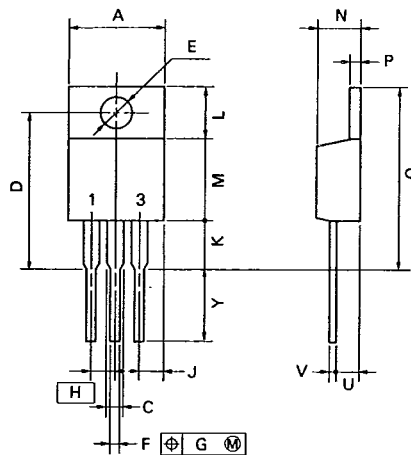
μPC7800H SERIES

6427525 N E C ELECTRONICS INC

05E 22537 D

PACKAGE DIMENSIONS (Unit: mm)

Typical values unless specified

T-58-11-13**NOTE**

Each lead centerline is located within 0.25 mm (0.01 inch) of its true position (T.P.) at maximum material condition.

P3HP-254B

ITEM	MILLIMETERS	INCHES
A	10.4 MAX.	0.41 MAX.
C	1.2 MIN.	0.047 MIN.
D	17.3 ^{±0.3}	0.681 ^{±0.012}
E	3.6 ^{±0.1}	0.142 ^{±0.004}
F	0.75 ^{±0.1}	0.03 ^{±0.004}
G	0.25	0.01
H	2.54	0.1
J	2.66 MAX.	0.105 MAX.
K	5.2 MIN.	0.205 MIN.
L	6.5 TYP.	0.256
M	8.5 TYP.	0.335
N	4.6 ^{±0.2}	0.181 ^{±0.008}
P	1.3 ^{±0.1}	0.051 ^{±0.004}
Q	22.52 MAX.	0.887 MAX.
U	3.0 MAX.	0.119 MAX.
V	0.45 ^{±0.1}	0.018 ^{±0.004}
Y	8.5 ^{±0.7}	0.335 ^{±0.028}