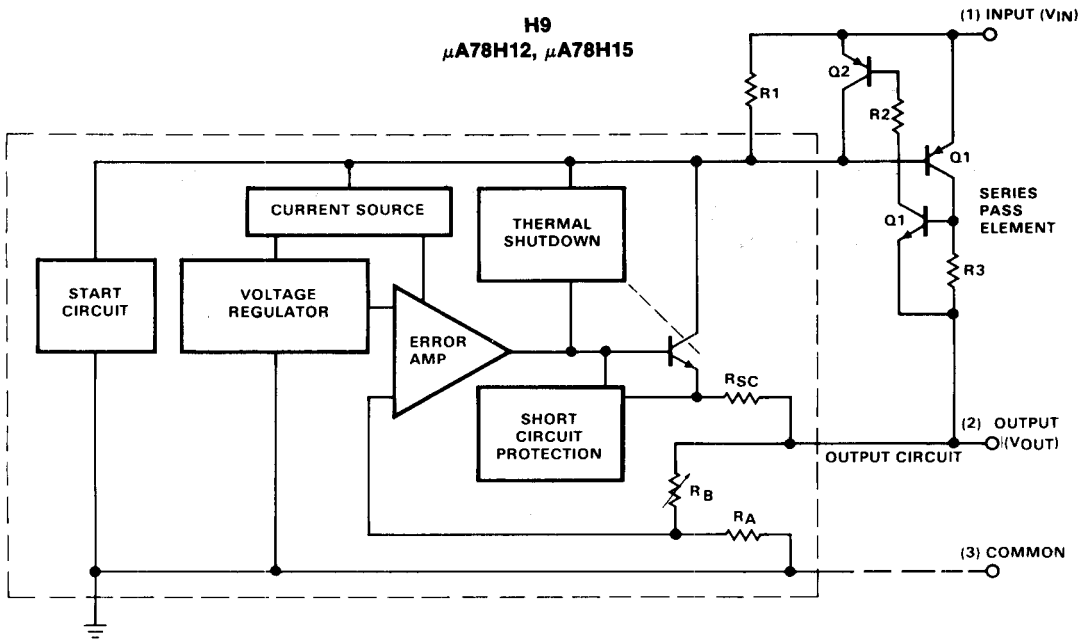


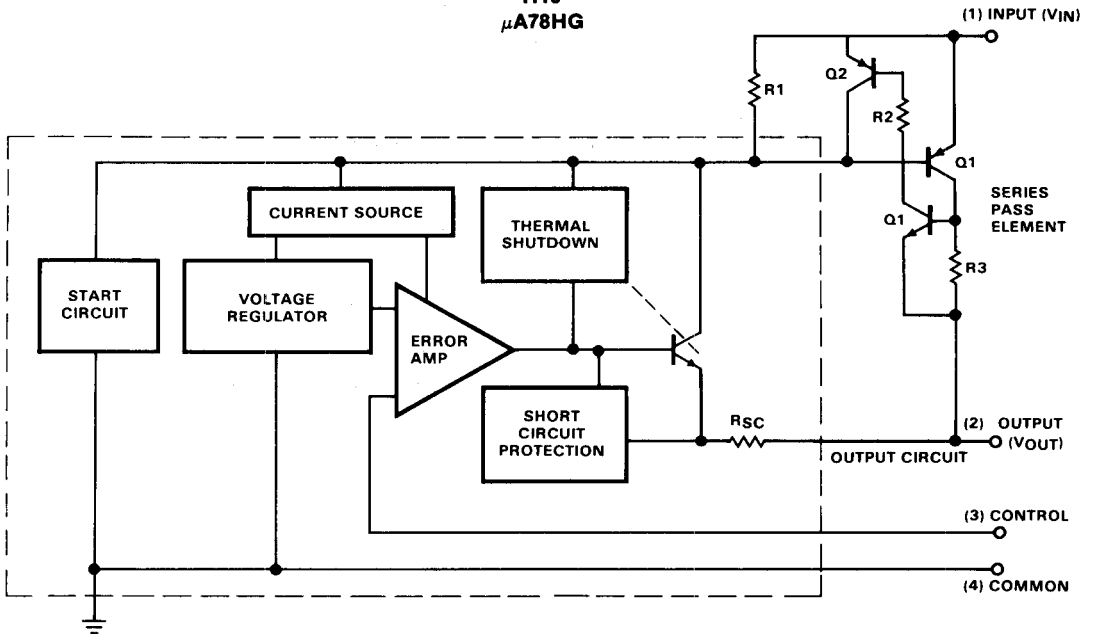
FAIRCHILD LOGIC/CONNECTION DIAGRAMS

HYBRID

H9
 μ A78H12, μ A78H15



H10
 μ A78HG



FAIRCHILD HYBRIDS

VOLTAGE REGULATORS

VOLTAGE REGULATORS

Item	DEVICE NO.	Description	Input Voltage Range-V	Output Voltage Range-V	Output Current A (Max)	Output Current Peak A (Typ)
1	SH123	3 Term. Pos. VR	7.5 to 25	5.0	3.0	8.0
2	SH223	3 Term. Pos. VR	7.5 to 25	5.0	3.0	8.0
3	SH323	3 Term. Pos. VR	7.5 to 25	5.0	3.0	8.0
4	μ A78H05	3 Term. Pos. VR	7.5 to 25	5.0	5.0	8.0
5	μ A78H05A	3 Term. Pos. VR	7.0 to 40	5.0	5.0	8.0
6	μ A78P05	3 Term. Pos. VR	7.0 to 40	5.0	10	12
7	μ A78H12	3 Term. Pos. VR	15.5 to 25	12	5.0	8.0
8	μ A78H15	3 Term. Pos. VR	18.5 to 25	15	5.0	8.0
9	SH1605*	Switching Regulator	5.0 to 40	2.0 to 20	5.0	10
10	μ A78HG	4 Term. Pos. VR	7.5 to 40	5.0 to 24	5.0	8.0
11	μ A79HG	4 Term. Neg. VR	7.0 to -40	-2.2 to -24	5.0	8.0

AMPLIFIERS

OPERATIONAL AMPLIFIER

Item	DEVICE NO.	Description	Input Offset Voltage mV	Input Offset Voltage Drift μ V/ $^{\circ}$ C	Input Offset Current nA
12	SH2714	Dual Instrumentation Amplifier	0.5	0.7	2.8

SERVO AMPLIFIER

Item	DEVICE NO.	Description	Input Offset Voltage mV	Input Offset Voltage Drift μ V/ $^{\circ}$ C	Input Offset Current-nA
13	SH3015*	Servo Amplifier	6.0	—	200

CURRENT AMPLIFIER

Item	DEVICE NO.	Function	Voltage Gain (Typ)	AC Current Gain-A/mA	Input Impedance K Ω (Typ)
14	SH0002	Current Amplifier	0.97	40	400

*To be announced

FAIRCHILD HYBRIDS

Line Regulation %	Quiescent Current mA	Ripple Rejection dB	Dropout Voltage V	Logic/ Connection Diagram	Package(s)
1	10	60	2.5	H12	TO-3
1	10	60	2.5	H12	TO-3
1	10	60	2.5	H12	TO-3
1	10	60	2.5	H12	TO-3
1	10	60	1.75	H12	TO-3
1	10	60	2.0	H12	TO-3
1	10	60	3.5	H9	TO-3
1	10	60	3.5	H9	TO-3
—	30	—	—	—	—
1	10	60	2.5	H10	4-pin TO-3
1	5	50	3.5	H11	4-pin TO-3

6

Input Bias Current nA	Common Mode Range V	Diff. Input Voltage V	Voltage Gain V/V	Bandwidth $A_V =$ MHz	Output Current A	Logic/ Connection Diagram	Package(s)
3.0	± 30	0.3	20K	1.0	—	H2	TO-116

Input Bias Current nA	Common Mode Range V	Diff. Input Voltage V	Voltage Gain V/V	Bandwidth $A_V =$ MHz	Output Current A	Logic/ Connection Diagram	Package(s)
500	± 12	—	—	—	6.0	—	—

Output Impedance Ω (Typ)	Output Voltage Swing (Typ)	DC Offset Voltage mV (Typ)	Bandwidth MHz (Typ)	Logic/ Connection Diagram	Package(s)
6.0	± 11	30	50	H1	TO-99

FAIRCHILD LINEAR

VOLTAGE REGULATORS

VOLTAGE REGULATORS (BY OUTPUT CURRENT) (Cont'd)

Item	DEVICE NO.	Output Voltage V (Typ)	Temperature (1)	Line Regulation mV (Max)	Load Regulation mV (Max)	Ripple Rejection dB (Min)	Quiescent Current mA	Input Voltage Range V	Dropout Voltage V (Typ)	Logic/Connection Diagram(s)	Package(s)
Fixed Negative 1.0 A (Cont'd)											
1	μ A7908	-8.0	C	160	160	54	2.0	-10.3 to -35	2.3	L-VR7,11	TO-3,TO-220
2	μ A7912	-12	M	120	120	54	3.0	-14.8 to -35	2.8	L-VR11	TO-3
3	μ A7912	-12	C	240	240	54	3.0	-14.3 to -35	2.3	L-VR7,11	TO-3,TO-220
4	μ A7915	-15	M	150	150	54	3.0	-17.8 to -35	2.8	L-VR11	TO-3
5	μ A7915	-15	C	300	300	54	3.0	-17.3 to -35	2.3	L-VR7,11	TO-3,TO-220
6	μ A7918	-18	M	180	180	54	3.0	-20.8 to -35	2.8	L-VR11	TO-3
7	μ A7918	-18	C	360	360	54	3.0	-20.3 to -35	2.3	L-VR7,11	TO-3,TO-220
8	μ A7924	-24	M	240	240	54	3.0	-26.8 to -40	2.8	L-VR11	TO-3
9	μ A7924	-24	C	480	480	54	3.0	-26.3 to -40	2.3	L-VR7,11	TO-3,TO-220
Fixed Positive 2.0 A											
10	μ A78CB	13.8	C	150	150	50	8.0	17 to 25	2.5	L-VR6,10	TO-3,TO-220
Fixed Positive 3.0 A											
11	SH123	5.0	M	25	100	—	20	7.5 to 20	2.5	H12	TO-3
12	SH223	5.0	M	25	100	—	20	7.5 to 20	2.5	H12	TO-3
13	SH323	5.0	C	25	100	—	20	7.5 to 20	2.5	H12	TO-3
Fixed Positive 5.0 A											
14	μ A78H05	5.0	C, M	120	50	60	10	8.5 to 25	3.5	H12	TO-3
15	μ A78H05A ⁽²⁾	5.0	C, M	25	50	60	10	7.8 to 2.5	2.3	H12	TO-3
16	μ A78H12	12	C	—	120	60	10	15.5 to 25	3.5	H9	TO-3
17	μ A78H15	15	C	30	30	60	10	18.5 to 25	—	H9	TO-3
Fixed Positive 10 A											
18	μ A78P05 ⁽²⁾	5.0	C	25	50	60	10	7.5 to 40	2.5	H12	TO-3

1. Operating junction temperature range:

C = Commercial temperature range, 0°C to +125°C; V = Vehicular & Industrial temperature range, -40°C to +125°C; M = Extended Military, -55°C to +150°C.

2. To be announced