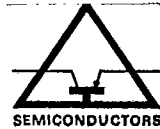


T-79-01



INTEGRATED CIRCUITS

TYPE	Input Offset Voltage @ $R_s \geq 10K$ mV (typ/max)	Input Offset Current nA (typ/max)	Input Bias Current nA (typ/max)	Openloop Voltage gain @ $R_L \geq 2K$ & $V = \pm 10V$ V/mV (min/typ)	Input Voltage range @ $V_s = 15V$ Volts (max)	Supply Voltage range Volts (max)	Output Voltage swing @ $R_L \geq 2K$ Volts (min/typ)	Slew Rate Volts/ μ sec (typ)	Unity gain Bandwidth MHz (typ)	CMMR@ $V_s = 15V$ $R_s = 10K$ Over Temp. dB (typ)	Supply Current @ $V_s = 15V$ mA (typ)	P_D mW (max)	Temp. Range $^{\circ}C$ min/max	Case
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(a) Operational amplifiers

LN 05

UA709	1/5	50/200	200/500	25/45	± 10	± 18	$\pm 10/\pm 13$	0.25	-	70	2.6	300	-55/+125	TO-99
UA709C	2/7.5	100/500	300/1500	12/-	± 10	± 18	$\pm 10/\pm 13$	0.25	-	90*	2.6	250	0/+70	TO-99
UA741	1/5	20/200	80/500	25/-	± 15	± 22	$\pm 10/\pm 13$	0.5	-	90	1.4	800	-55/+125	TO-99
UA741C	2/6	20/200	80/500	15/-	± 15	± 22	$\pm 10/\pm 13$	0.5	-	90*	1.4	800	0/+70	TO-99
UA748	1/5	20/200	80/500	50/200	± 15	± 22	$\pm 10/\pm 13$	0.5	-	90	1.7	500	-55/+125	TO-99
UA748C	2/6	20/200	80/500	50/200	± 15	± 18	$\pm 10/\pm 13$	0.5	-	90	1.7	500	0/+70	TO-99
LM101	1/5	40/200	110/500	25/-	± 15	± 22	$\pm 10/\pm 13$	0.5	-	90	1.8	500	-55/+125	TO-99
LM101A	0.7/2*	1.5/10	30/75	25/-	$\pm 15^{**}$	± 22	$\pm 10/\pm 13$	0.5	-	96*	1.2**	500	-55/+125	TO-99
LM201	2/2.7	100/500	250/1500	15/-	± 15	± 18	$\pm 10/\pm 13$	0.5	-	90	1.8	500	0/+70	TO-99
LM201A	0.7/2*	1.5/10	30/75	25/-	$\pm 15^{**}$	± 18	$\pm 10/\pm 13$	0.5	-	96*	1.2**	500	-25/+85	TO-99
LM301A	2/7.5*	3/50	70/250	15/-	± 12	± 18	$\pm 10/\pm 13$	0.5	-	90*	1.8	500	0/+70	TO-99
LM208	0.7/2	-/5	0.8/2	60/-	± 12	± 18	$\pm 10/\pm 13$	0.5	-	90	1.8	500	-25/+85	TO-99
LM308	2/7.5	0.2/1	1.5/7	15/-	± 15	± 18	$\pm 13/\pm 14$	-	-	100	0.3	500	0/+70	TO-99
LM308A	0.3/0.5	0.05/0.2	0.8/2	60/-	± 15	± 18	$\pm 13/\pm 14$	-	-	110	0.3	500	0/+70	TO-99

(b) Quad single supply operational amplifiers (+ $V_s = 5.0V$)

LN 05

LM324	$\pm 2/\pm 7^+$	$\pm 5/\pm 50^+$	45/250 ⁺	25/100	-0.3 to ± 32	± 32 to ± 16	26/- ϕ	-	-	70 ⁺	1.5 ϕ	468	0/+70	Plastic DIP 14 pin
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(c) Instrumentation grade operational amplifiers

LN 05

OP-07A	0.01/0.025	0.3/2	$\pm 0.7/\pm 2$	300/500	± 14	± 22	$\pm 12/\pm 12.8$	0.17	0.5	126	-	500	-55/+125	TO-99
OP-07	0.03/0.075	0.4/2.8	$\pm 1/\pm 3$	200/500	± 14	± 22	$\pm 12/\pm 12.8$	0.17	0.5	126	-	500	-55/+125	TO-99
LM714	0.03/0.075	0.4/2.8	$\pm 1/\pm 3$	200/500	± 14	± 22	$\pm 12/\pm 12.8$	0.17	0.5	126	-	500	-55/+125	TO-99
LM725	0.5/1	2/20	42/100	1000/-	± 14	± 22	$\pm 10/\pm 13.5$	-	-	100	-	500	-55/+125	TO-99

(d) Quad single supply comparator

LN 14

LM339	$\pm 2/\pm 5^+$	$\pm 5/\pm 50^+$	25/250 ⁺	-/200	-0.3 to ± 36	± 36 to ± 18	-	-	-	-	0.8 ⁺	468	0/+70	Plastic DIP 14 pin
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* $R_s \geq 50K$ ** $V_s = 20V$

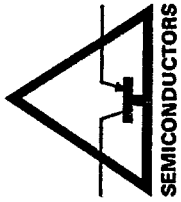
⊕ Internal power dissipation

$T_a = 25^{\circ}C$ + $V_s = +5V$ ϕ $V_s = +30V$

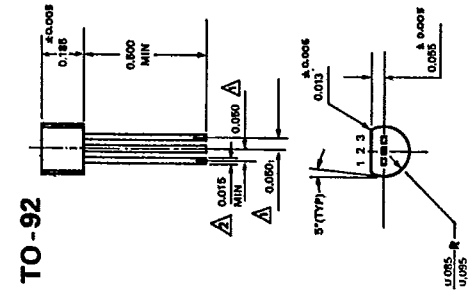
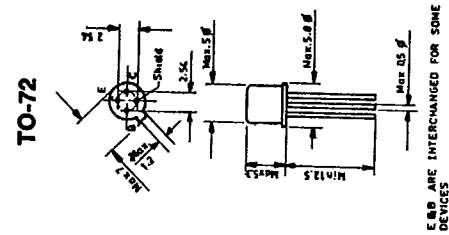
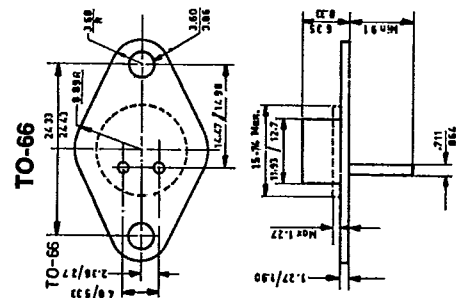
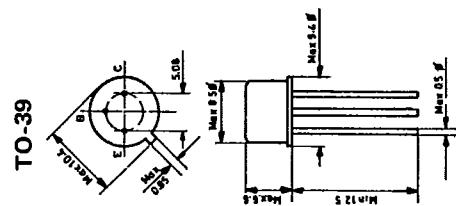
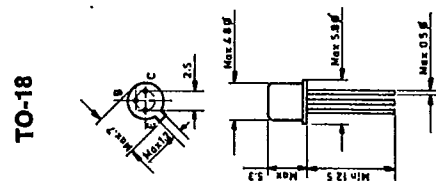
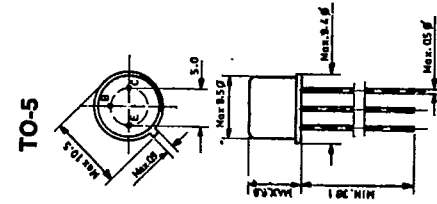
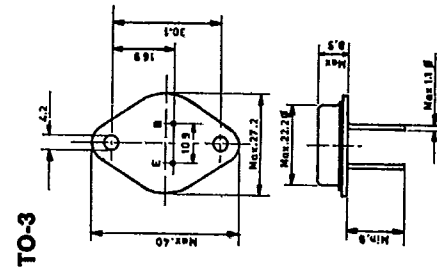
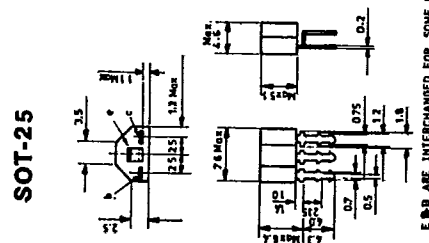
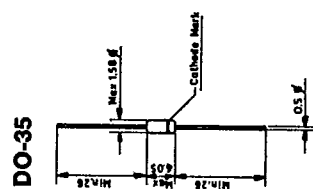
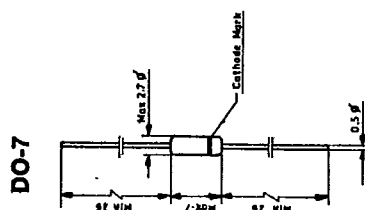
(e) Comparators

LN 14

TYPE	Input Offset Voltage @ $R \leq 0.2K$ mV	Input Bias Current nA (typ/max)	Input Offset Current μA (typ)	Voltage Gain (min/typ)	Output Sink Current $V_{in} \geq 5V$ $V_{out} = 0$ mA	Response Time nsec	CMMR@ $R_s \leq 0.2K$ dB	Power @ Consumption mW	Temp. range $^{\circ}C$ (min/max)	Case
UA710	0.6/2	13/20	0.75	1.25K/1.7K	2.5	40	100	300	-55/+125	TO-99
UA710C	1.6/5	16/25	1.8	1.0K/1.5K	2.5	40	90	300	0/70	TO-99
UA711	1/3.5	25/75	0.5	750/1500	0.8	40	-	130	-55/+125	TO-99
UA711C	1/5	25/100	0.5	700/1500	0.8	40	-	130	0/+70	TO-99



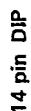
CASE OUTLINES



(Dimensions in inches)

EMB ARE INTERCHANGED FOR SOME DEVICES

Note : Dimensions in mm unless otherwise specified



Note : Dimensions in mm unless otherwise specified