

Audio Power Amplifiers

Type No.	Use	Circuit Description	Supply Voltage (V)	Electrical Characteristics				Package Outline																																			
μPC571C	Stereo set Tape recorder Radio receiver ($P_O = 6.5W @ 8\Omega$)	<ul style="list-style-type: none"> Differential input 2-stage amplifier Quasi complementary output stage Built-in short protection circuit Single or dual power supply operation 	$\pm 10 \sim \pm 14$	$(Ta = 25^\circ C, V_{CC} = \pm 12V, f = 1kHz, R_L = 8\Omega)$ <table> <tr> <td>I_{CC}</td><td>10~22</td><td>~35</td><td>(mA)</td><td></td></tr> <tr> <td>P_O</td><td>6~6.5</td><td>~</td><td>(W)</td><td></td></tr> <tr> <td>Av</td><td>44~46</td><td>~48</td><td>(dB)</td><td>$R_f = 100\Omega, R_{NF} = 20k\Omega$</td></tr> <tr> <td>T.H.D.</td><td>~1</td><td>~3</td><td>(%)</td><td>$P_O = 5W$</td></tr> <tr> <td>NL</td><td>~1</td><td>~5</td><td>(mV)</td><td>$R_G = 20k\Omega$</td></tr> <tr> <td>R_i</td><td>16~20</td><td>~24</td><td>(kΩ)</td><td></td></tr> </table>				I_{CC}	10~22	~35	(mA)		P_O	6~6.5	~	(W)		Av	44~46	~48	(dB)	$R_f = 100\Omega, R_{NF} = 20k\Omega$	T.H.D.	~1	~3	(%)	$P_O = 5W$	NL	~1	~5	(mV)	$R_G = 20k\Omega$	R_i	16~20	~24	(kΩ)		14-pin DIP (①)					
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μPC575C2	Cassette tape recorder Car stereo set Car radio receiver Stereo set Record player ($P_O = 2W @ 8\Omega$)	<ul style="list-style-type: none"> Differential input 2-stage amplifier Quasi complementary output stage 	9~17	$(Ta = 25^\circ C, V_{CC} = 13.2V, f = 1kHz, R_L = 8\Omega)$ <table> <tr> <td>I_{CC}</td><td>8~12</td><td>~16</td><td>(mA)</td><td></td></tr> <tr> <td>P_O</td><td>1.5~2.0</td><td>~</td><td>(W)</td><td>T.H.D. ≤ 10%</td></tr> <tr> <td>Av</td><td>51~</td><td>~56</td><td>(dB)</td><td>$P_O = 0.5W$</td></tr> <tr> <td>T.H.D.</td><td>~0.5</td><td>~1.5</td><td>(%)</td><td>$P_O = 0.5W$</td></tr> <tr> <td>NL</td><td>~0.4</td><td>~0.8</td><td>(mV)</td><td>$R_G = 0\Omega$</td></tr> </table>				I_{CC}	8~12	~16	(mA)		P_O	1.5~2.0	~	(W)	T.H.D. ≤ 10%	Av	51~	~56	(dB)	$P_O = 0.5W$	T.H.D.	~0.5	~1.5	(%)	$P_O = 0.5W$	NL	~0.4	~0.8	(mV)	$R_G = 0\Omega$	8-pin DIP with TAB (F)										
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μPC576H	Stereo set Tape recorder Record player ($P_O = 3.5W @ 8\Omega$)	<ul style="list-style-type: none"> Differential input 2-stage amplifier Quasi complementary output stage 	8~24	$(Ta = 25^\circ C, V_{CC} = 18V, f = 1kHz, R_L = 8\Omega)$ <table> <tr> <td>I_{CC}</td><td>25~35</td><td>~45</td><td>(mA)</td><td></td></tr> <tr> <td>P_O</td><td>3~3.5</td><td>~</td><td>(W)</td><td>T.H.D. = 10%</td></tr> <tr> <td>Av</td><td>49~</td><td>~56</td><td>(dB)</td><td>$P_O = 0.5W$</td></tr> <tr> <td>T.H.D.</td><td>~0.65~1.8</td><td>~</td><td>(%)</td><td>$R_G = 0$</td></tr> <tr> <td>NL</td><td>~0.36~0.8</td><td>~</td><td>(mV)</td><td></td></tr> <tr> <td>R_i</td><td>~20</td><td>~</td><td>(kΩ)</td><td></td></tr> <tr> <td>V_{HAM}</td><td>~55~</td><td>~</td><td>(dB)</td><td>ripple input 300mVp-p</td></tr> </table>				I_{CC}	25~35	~45	(mA)		P_O	3~3.5	~	(W)	T.H.D. = 10%	Av	49~	~56	(dB)	$P_O = 0.5W$	T.H.D.	~0.65~1.8	~	(%)	$R_G = 0$	NL	~0.36~0.8	~	(mV)		R_i	~20	~	(kΩ)		V_{HAM}	~55~	~	(dB)	ripple input 300mVp-p	10-pin SIP (C)
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μPC578C	Stereo set Tape recorder Radio receiver ($P_O = 7W @ 8\Omega$)	<ul style="list-style-type: none"> Differential input 2-stage amplifier Quasi complementary output stage Single or dual power supply operation 	$\pm 9 \sim \pm 15$	$(Ta = 25^\circ C, V_{CC} = \pm 12V, f = 1kHz, R_L = 8\Omega)$ <table> <tr> <td>I_{CC}</td><td>10~22</td><td>~35</td><td>(mA)</td><td></td></tr> <tr> <td>P_O</td><td>6~7</td><td>~</td><td>(W)</td><td>T.H.D. = 10%</td></tr> <tr> <td>Av</td><td>44~45</td><td>~46</td><td>(dB)</td><td>$P_O = 0.5W$</td></tr> <tr> <td>T.H.D.</td><td>~0.5</td><td>~1.5</td><td>(%)</td><td>$P_O = 0.5W$</td></tr> <tr> <td>NL</td><td>~0.3</td><td>~0.8</td><td>(mV)</td><td>$R_G = 0\Omega$</td></tr> <tr> <td>R_i</td><td>16~20</td><td>~24</td><td>(kΩ)</td><td></td></tr> </table>				I_{CC}	10~22	~35	(mA)		P_O	6~7	~	(W)	T.H.D. = 10%	Av	44~45	~46	(dB)	$P_O = 0.5W$	T.H.D.	~0.5	~1.5	(%)	$P_O = 0.5W$	NL	~0.3	~0.8	(mV)	$R_G = 0\Omega$	R_i	16~20	~24	(kΩ)		14-pin DIP (①)					
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μPC1025H	Car stereo set Car radio receiver ($P_O = 4.8W @ 4\Omega$)	<ul style="list-style-type: none"> Direct coupled 2-stage amplifier Common emitter output stage 	9~17	$(Ta = 25^\circ C, V_{CC} = 13.2V, f = 1kHz, R_L = 4\Omega)$ <table> <tr> <td>I_{CC}</td><td>15~28</td><td>~45</td><td>(mA)</td><td></td></tr> <tr> <td>P_O</td><td>4.0~4.8</td><td>~</td><td>(W)</td><td>T.H.D. = 10%</td></tr> <tr> <td>Av</td><td>49~51.5</td><td>~52</td><td>(dB)</td><td>$P_O = 0.5W$</td></tr> <tr> <td>T.H.D.</td><td>~0.6</td><td>~1.2</td><td>(%)</td><td>$P_O = 0.5W$</td></tr> <tr> <td>NL</td><td>~1.4</td><td>~4.0</td><td>(mV)</td><td>$R_G = \infty$</td></tr> </table>				I_{CC}	15~28	~45	(mA)		P_O	4.0~4.8	~	(W)	T.H.D. = 10%	Av	49~51.5	~52	(dB)	$P_O = 0.5W$	T.H.D.	~0.6	~1.2	(%)	$P_O = 0.5W$	NL	~1.4	~4.0	(mV)	$R_G = \infty$	10-pin SIP (C)										
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μPC1154H	Car stereo set Car radio receiver ($P_O = 4.8W @ 4\Omega$)	<ul style="list-style-type: none"> Differential input 3-stage amplifier Quasi complementary output stage 	10~17	$(Ta = 25^\circ C, V_{CC} = 13.2V, f = 1kHz, R_L = 4\Omega)$ <table> <tr> <td>I_{CC}</td><td>16~32</td><td>~55</td><td>(mA)</td><td></td></tr> <tr> <td>P_O</td><td>4.0~4.8</td><td>~</td><td>(W)</td><td>T.H.D. = 10%</td></tr> <tr> <td>Av</td><td>49~52</td><td>~56</td><td>(dB)</td><td>$P_O = 0.5W$</td></tr> <tr> <td>T.H.D.</td><td>~0.3</td><td>~1.2</td><td>(%)</td><td>$P_O = 0.5W$</td></tr> <tr> <td>NL</td><td>~1.4</td><td>~4.0</td><td>(mV)</td><td>$R_G = \infty$</td></tr> </table>				I_{CC}	16~32	~55	(mA)		P_O	4.0~4.8	~	(W)	T.H.D. = 10%	Av	49~52	~56	(dB)	$P_O = 0.5W$	T.H.D.	~0.3	~1.2	(%)	$P_O = 0.5W$	NL	~1.4	~4.0	(mV)	$R_G = \infty$	10-pin SIP (D)										
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μPC1155H	Car stereo set Car radio receiver ($P_O = 5.5W @ 4\Omega$)	<ul style="list-style-type: none"> Differential input 3-stage amplifier Quasi complementary output stage 	9~17	$(Ta = 25^\circ C, V_{CC} = 13.2V, f = 1kHz, R_L = 4\Omega)$ <table> <tr> <td>I_{CC}</td><td>18~30</td><td>~60</td><td>(mA)</td><td></td></tr> <tr> <td>P_O</td><td>4.8~5.5</td><td>~</td><td>(dB)</td><td>T.H.D. = 10%</td></tr> <tr> <td>Av</td><td>49~51.2</td><td>~52</td><td>(dB)</td><td>$P_O = 0.5W$</td></tr> <tr> <td>T.H.D.</td><td>~0.5</td><td>~1.2</td><td>(%)</td><td>$P_O = 0.5W$</td></tr> <tr> <td>NL</td><td>~1.4</td><td>~4</td><td>(mA)</td><td>$R_G = \infty$</td></tr> </table>				I_{CC}	18~30	~60	(mA)		P_O	4.8~5.5	~	(dB)	T.H.D. = 10%	Av	49~51.2	~52	(dB)	$P_O = 0.5W$	T.H.D.	~0.5	~1.2	(%)	$P_O = 0.5W$	NL	~1.4	~4	(mA)	$R_G = \infty$	10-pin SIP (D)										
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μPC1156H	Car stereo set Car radio receiver ($P_O = 5.8W @ 4\Omega$)	<ul style="list-style-type: none"> Differential input 3-stage amplifier Quasi complementary output stage 	9~17	$(Ta = 25^\circ C, V_{CC} = 13.2V, f = 1kHz, R_L = 4\Omega)$ <table> <tr> <td>I_{CC}</td><td>18~30</td><td>~60</td><td>(mA)</td><td></td></tr> <tr> <td>P_O</td><td>5.0~5.8</td><td>~</td><td>(W)</td><td>T.H.D. = 10%</td></tr> <tr> <td>Av</td><td>52~55</td><td>~58</td><td>(dB)</td><td>$P_O = 0.5W$</td></tr> <tr> <td>T.H.D.</td><td>~0.3</td><td>~1.0</td><td>(%)</td><td>$P_O = 0.5W$</td></tr> <tr> <td>NL</td><td>~1.4</td><td>~4</td><td>(mV)</td><td>$R_G = 10k\Omega$</td></tr> </table>				I_{CC}	18~30	~60	(mA)		P_O	5.0~5.8	~	(W)	T.H.D. = 10%	Av	52~55	~58	(dB)	$P_O = 0.5W$	T.H.D.	~0.3	~1.0	(%)	$P_O = 0.5W$	NL	~1.4	~4	(mV)	$R_G = 10k\Omega$	10-pin SIP (D)										
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