

# SONY®

# CXA1115BP

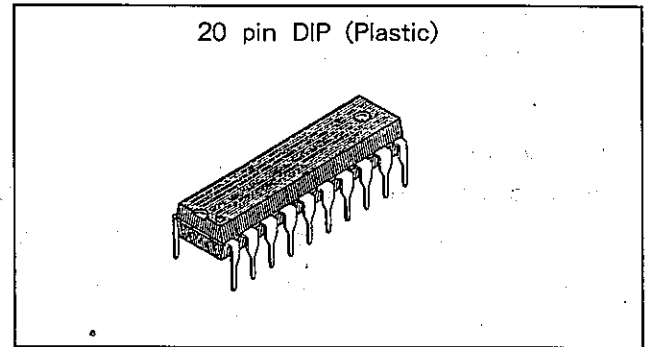
## Radio Cassette Playback Pre-amplifier

### Description

CXA1115BP is a pre-amplifier for radio cassette PB. Built-in head select circuit, metal/normal tape bias select circuit, bias select circuit at high speed and others, easily compose a double radio cassette.

### Functions

- Pre-amplifier × 2, mixing amplifier × 1 and electronic switch × 6



### Applications

- Stereo compact cassette player for PB
- Stereo cassette deck player

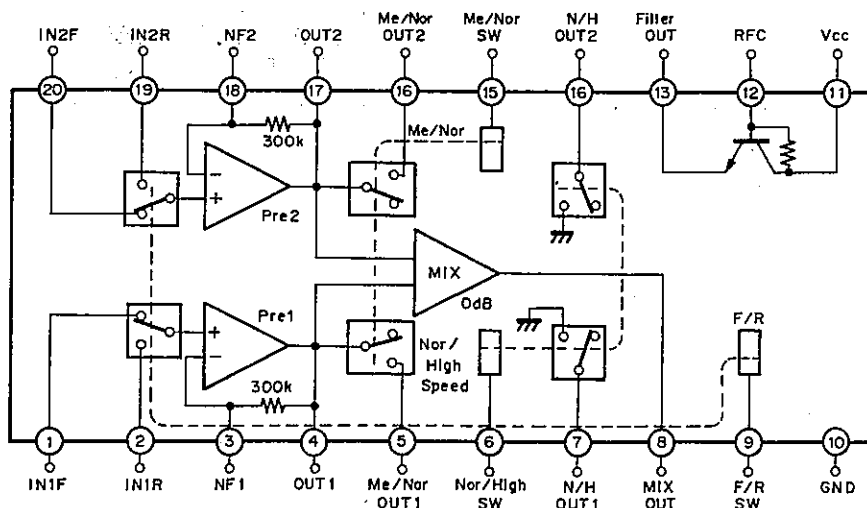
### Absolute Maximum Ratings (Ta = 25°C)

• Supply voltage	V <sub>CC</sub>	16	V
• Operating temperature	T <sub>opr</sub>	-20 to +75	°C
• Storage temperature	T <sub>stg</sub>	-40 to +125	°C
• Allowable power dissipation	P <sub>D</sub>	500	mW

### Operating Conditions

• Supply voltage	V <sub>CC</sub>	6	V
• Operating voltage	V <sub>CC (op)</sub>	3.5 to 14	V

### Equivalent Circuit Block Diagram



**Operation Characteristics** (Ta = 25 °C, Vcc = 6.0V, RL = 10k Ω, f = 1kHz, 0dB = 0.775V)

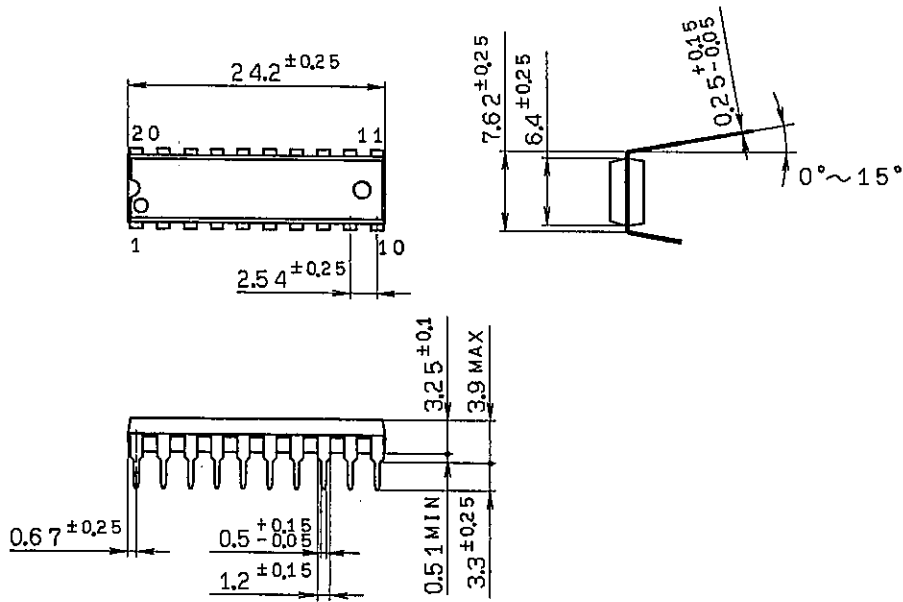
Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Current at no signal	Icco	Nor/Nor Speed Forward	5	7	12	mA
Current at no signal	Iccs	Metal/High Speed Forward	7	10	17	mA
Voltage gain (open)	VGo		75	85		dB
Voltage gain (close)	VG	Nor/Nor Speed, NAB	39.5	40.5	41.5	dB
Total harmonic distortion	THD	V <sub>o</sub> = 0.65V, Nor/Nor Speed		0.03	0.2	%
Maximum output voltage	V <sub>o</sub> MAX	THD = 1%, Nor/Nor Speed	0.7	1.2		V
Cross talk (between channels)	CT1	V <sub>o</sub> = -5 dBm, R <sub>g</sub> = 2.2 kΩ Nor/Nor Speed	50	65		dB
Cross talk (between F/R)	CT2	V <sub>o</sub> = -5 dBm, R <sub>g</sub> = 2.2 kΩ Nor/Nor Speed	50	65		dB
Channel balance	V <sub>BL</sub>	V <sub>i</sub> = -50 dBm		0	2	dB
Input conversion noise voltage	V <sub>NI</sub>	R <sub>g</sub> = 2.2 kΩ, B.P.F. 20 to 20 kHz Nor/Nor Speed		0.9	1.7	μV
MIX output voltage	V <sub>o</sub> MIX	V <sub>o1</sub> , V <sub>o2</sub> = 0 dBm	-3	0	3	dB
Ripple filter output current	I <sub>FOUT</sub>			10	15	mA
Electronic SW ON resistance	R <sub>ON</sub>	Between each of Pins 1 to 4 and Pin 5. Between Pins 16 and 17. Between each of Pins 1 to 7 and Pin 10. Between Pins 10 and 14.		100	250	Ω
DC feed back resistance	R <sub>F</sub>		240	300	360	kΩ
Input bias current	I <sub>F</sub>			0.5	3.0	μA





Package Outline Unit : mm

CXA1115BP 20 pin DIP (Plastic) 300mil 1.2g



DIP-20P-061