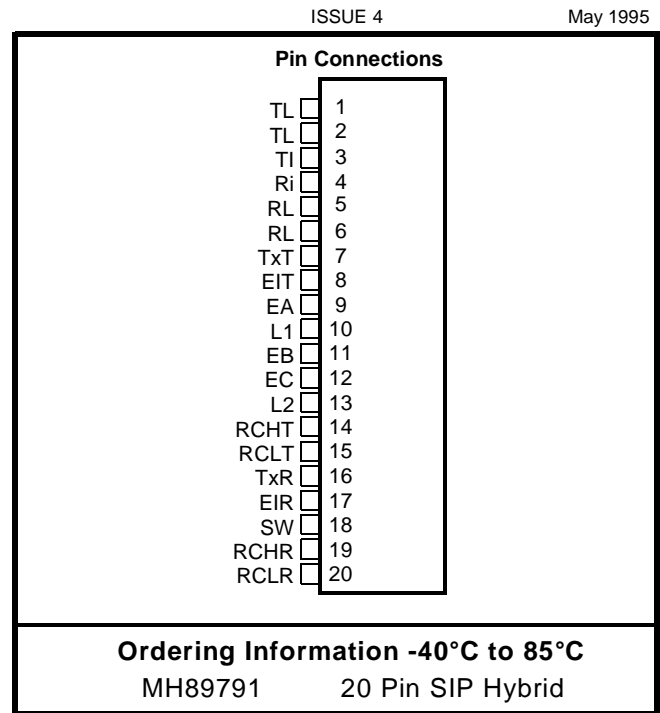


### Features

- Used with the MH89790B
- Programmable equalization for different line lengths
- 6dB loop around circuit

### Description

The MH89791 is a programmable network for use with a PCM 30 line interface, specifically the MH89790B on The ISDN EXPRESS™ Card. The MH89791 contains transmit equalizer and a 6 dB pad, for external loop around, with 120Ω input and output impedances. It is fabricated in thick film hybrid technology and is 2 inches high by 0.5 inches wide. The MH89791 is designed to interface to 22 gauge/.6 mm twisted pair. Figure 1 shows how the MH89791 is connected to the transmit side of a PCM 30 interface. The seven switches control the distance settings of the equalizer. Ti, Ri, TL, and RL are the inputs and outputs of the 6 dB pad. The 4 pole double throw relay connected to the transformer inputs and outputs shows how the transmit signal is switched between the equalizer for normal operation,



and the 6dB pad for loop around. Figure 2 shows the circuit description of the MH89791 while Figure 3 shows the switch settings for the Tx equalizer.

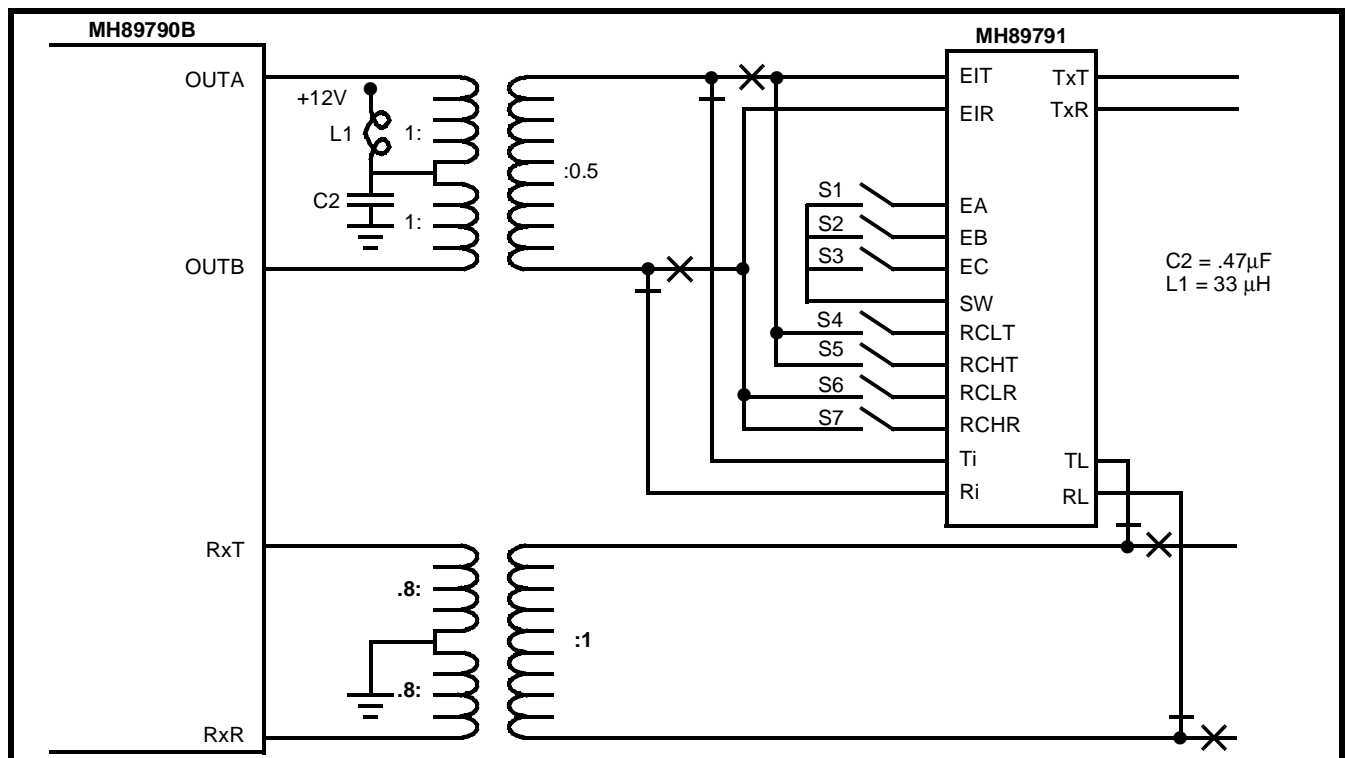


Figure 1 - Connection Diagram

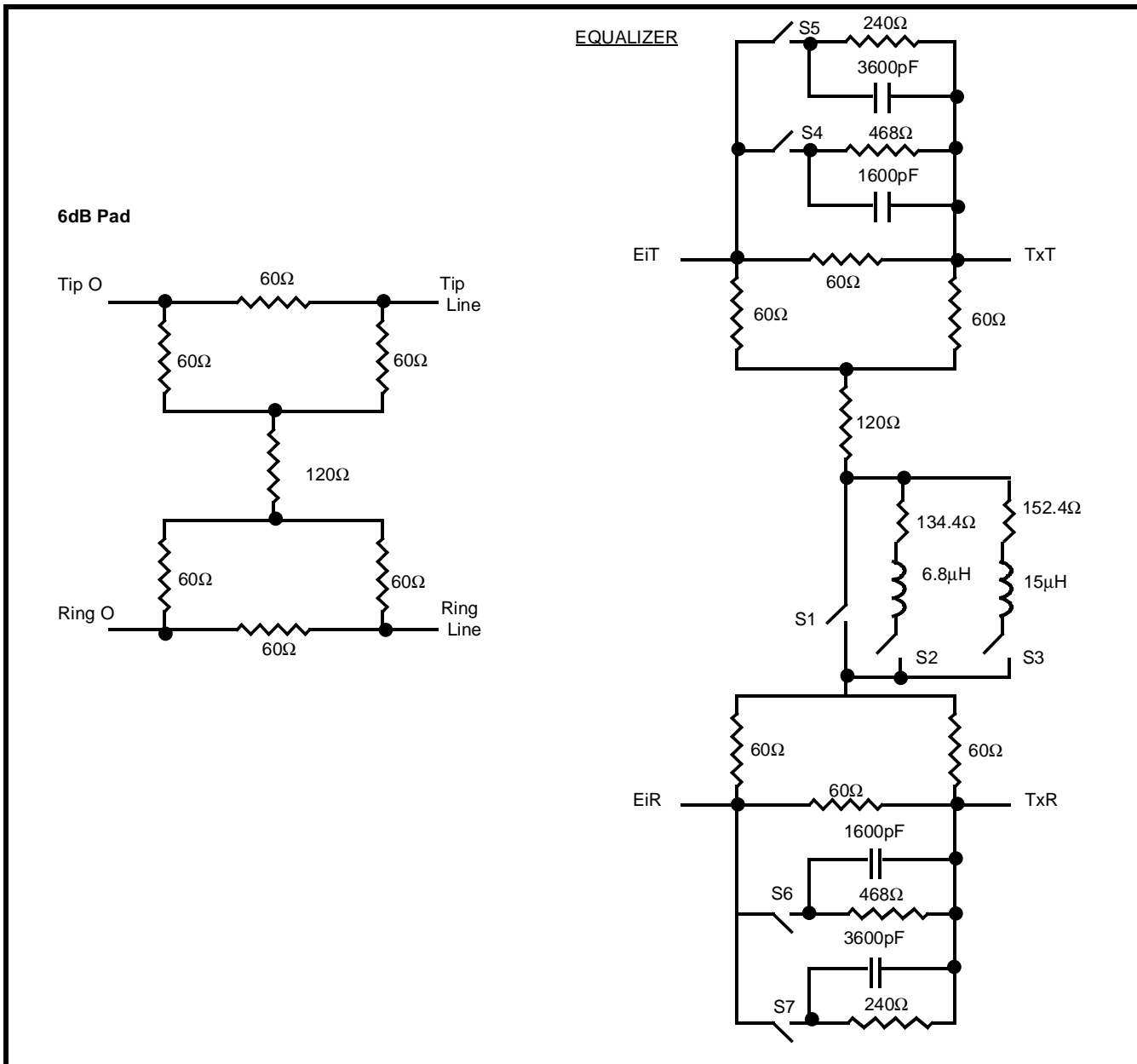


Figure 2 - MH89791 Circuit Description

-=SWITCH OPENED X=SWITCH CLOSED	S1	X	-	-	X	-	-	X	-	-	X	-	-
	S2	-	X	-	-	X	-	-	X	-	-	X	-
	S3	-	-	X	-	-	X	-	-	X	-	-	X
	S4	-	-	-	X	X	X	-	-	-	X	X	X
	S5	-	-	-	-	-	-	X	X	X	X	X	X
	S6	-	-	-	X	X	X	-	-	-	X	X	X
	S7	-	-	-	-	-	-	X	X	X	X	X	X
			↑ NO EQUALIZATION      ← INCREASING EQUALIZATION →      ↑ MAX. EQUALIZATION										

Figure 3 - Switch Settings for Different Levels of Equalization

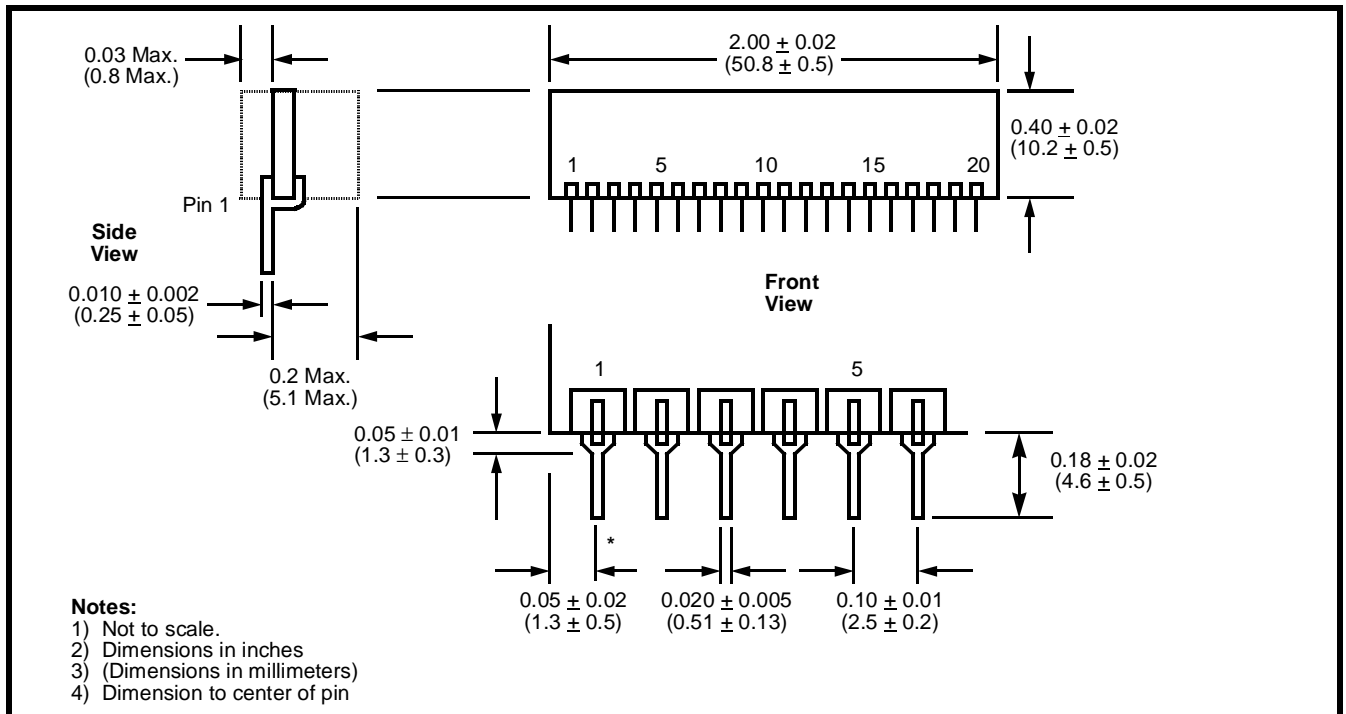


Figure 4 - Mechanical Data

NOTES: