

Mute detector IC

BA3703F

The BA3703F is a mute detector designed for car stereos. It features low external parts count, and can detect mute whether the tape is playing or being fast-forwarded.

It features a wide power supply voltage range (6.0V to 16.0V) and is ideal for use in car stereos and other audio equipment.

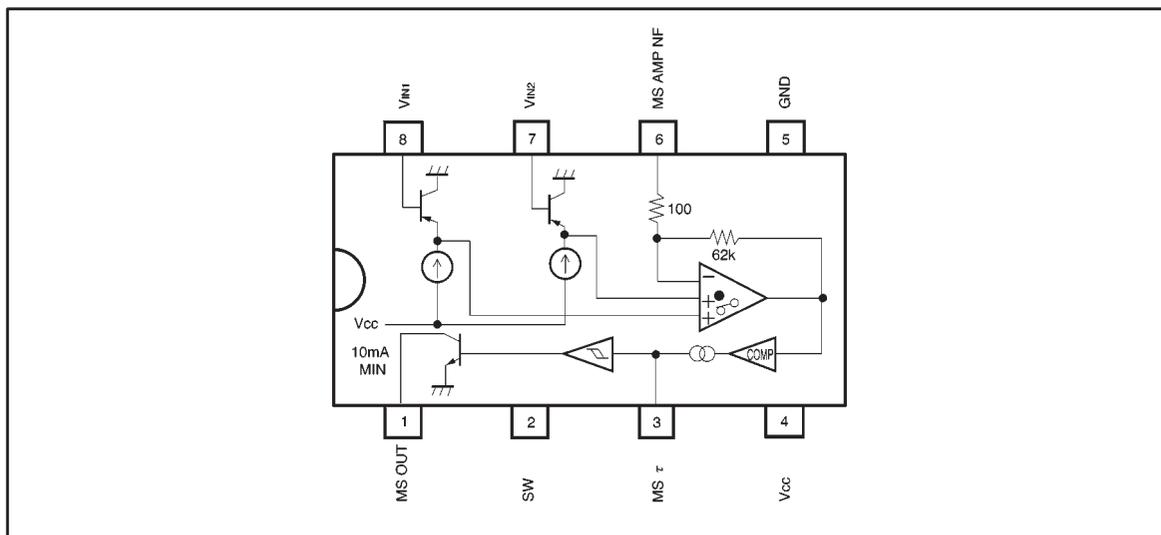
●Application

Car stereos

●Features

- 1) Can detect mute during playback and fast-forward.
- 2) The signal detect and mute detect times can be set using attached components.
- 3) Wide operating voltage range (6.0V to 16.0V).

●Block diagram



●Absolute maximum ratings (Ta = 25°C)

Parameter	Symbol	Limits	Unit
Power supply voltage	V _{CC}	18	V
Power dissipation	P _d	550*	mW
Operating temperature	T _{opr}	-30~+85	°C
Storage temperature	T _{stg}	-55~+125	°C

* When mounted on a 70mm×70mm×1.6mm glass epoxy board.
Reduced by 5.5mW for each increase in Ta of 1°C over 25°C.

●Recommended operating conditions (Ta = 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Power supply voltage	V _{CC}	6.0	—	16.0	V

● Application example

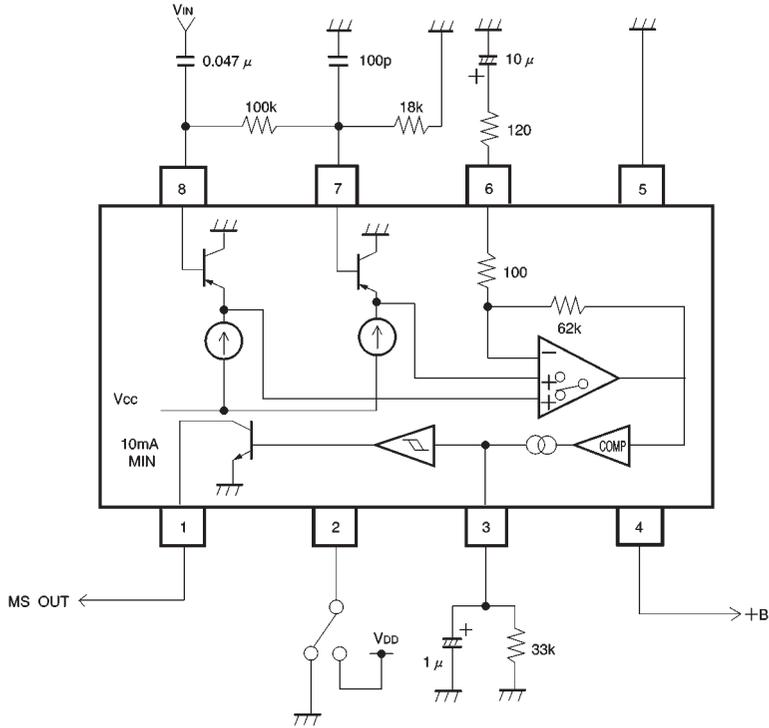


Fig. 2

● Electrical characteristic curves

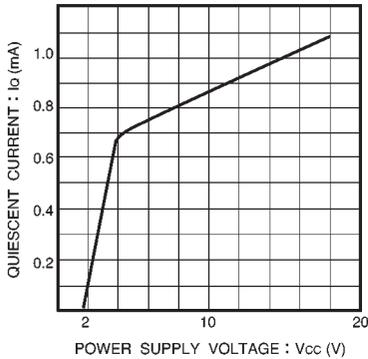


Fig. 3 Quiescent current vs. power supply voltage

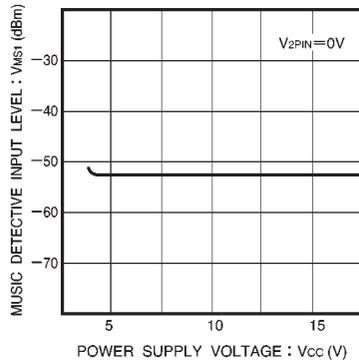


Fig. 4 Song detection input level 1 vs. power supply voltage

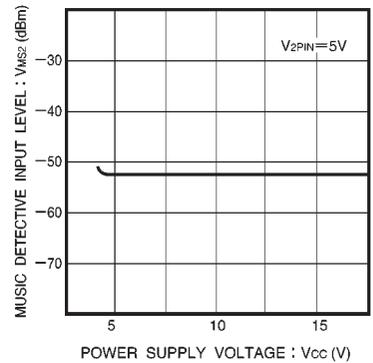


Fig. 5 Song detection input level 2 vs. power supply voltage

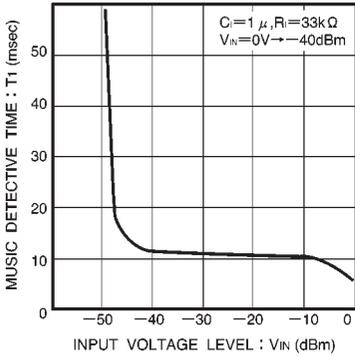


Fig. 6 Song detection time vs. input voltage level

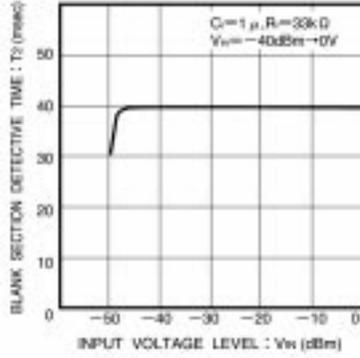


Fig. 7 Mute detection time vs. input voltage level

● External dimensions (Units: mm)

