

SANYO

No.730F

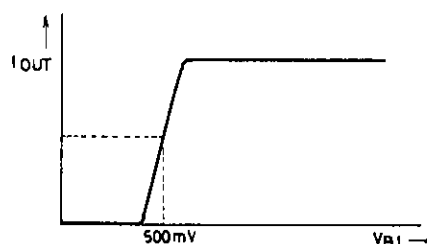
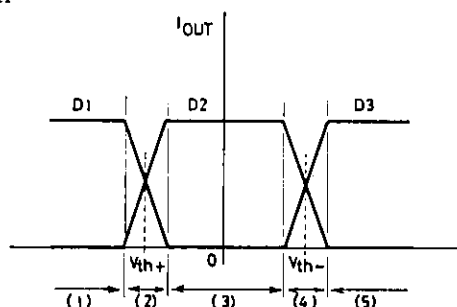
LB1450**LED Tuning Indicator****Use**

Indicates tuning condition of FM receiver by means of 5 mode - 3 LED's

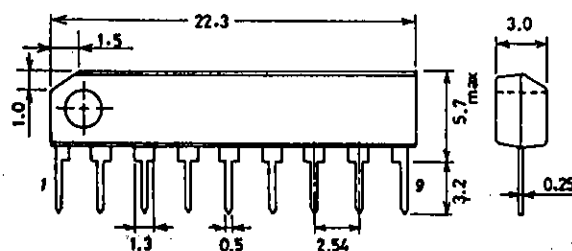
Features

1. 3 LED's display 5 mode tuning condition.
Since the LED's are driven under constant current supply, the LED current varies as shown below when two LED's are lighted on simultaneously. This causes their brightness to vary, and enables the dynamic indication.
2. Desired tuning width can be set as the threshold width of window comparator is variable externally.
3. No switching radiation can be made as LED current changes over linearly.
4. Blanking at station interval and AM reception is easy to set by blanking pin.
5. Direct interface can be made to IF IC using quadrature detector (ex. LA1231, LA1140, etc.)
6. Single-ended 9 pin packaged with small mounting area.

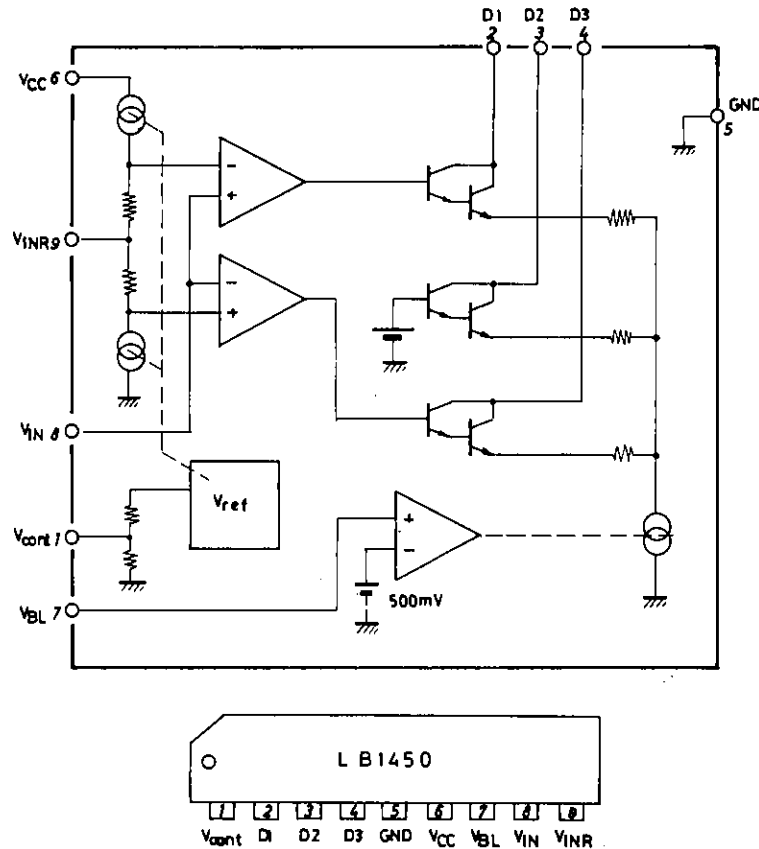
mode	LED light-ing mode			tuning condition
(1)	▶	○	◁	(-) detuned
(2)	▶	●	◁	semituned
(3)	▷	●	▷	tuned
(4)	▷	●	▶	semituned
(5)	▷	○	▶	(+) detuned
(6)	▷	○	◁	lighted off



Package Dimensions 3017B
unit: mm



Equivalent Circuit Block Diagram and Pin Assignment

Absolute Maximum Ratings at $T_a=25^\circ\text{C}$

Max. Supply Voltage	V_{CCmax}		18	V
Max. Input Voltage	V_{INR}	$V_{CC}>V_{INR}$	-0.3 to +16	V
	V_{IN}	$V_{CC}>V_{IN}$	-0.3 to +16	V
	V_{cont}		-0.3 to +4	V
	V_{BL}	$V_{CC}>V_{BL}$	-0.3 to +16	V
Max. Output Voltage	V_{out}	Pin2, 3, 4	16	V
Allowable Power Dissipation	P_{dmax}	$T_a=60^{\circ}C$	500	mW
Operating Temperature	T_{opr}		-20 to +70	$^{\circ}C$

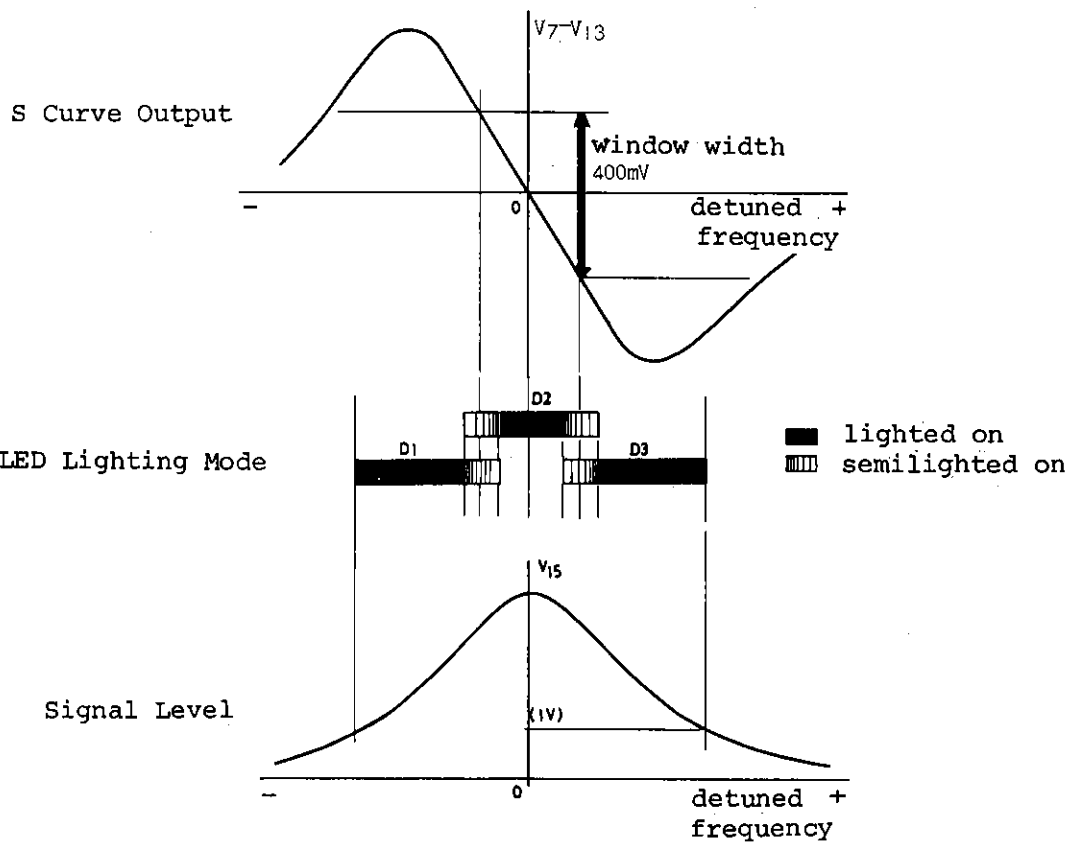
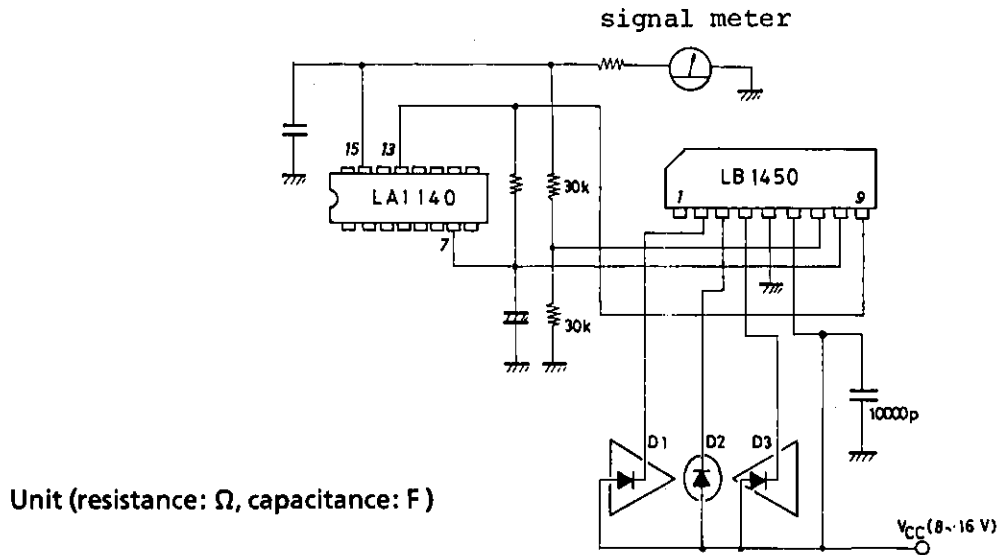
Allowable Operating Conditions at $T_a=25^\circ\text{C}$

Supply Voltage	V_{CC}	8 to 16	V
Tuning Indicaiton Voltage	V_T	200	mV
Width			

Electrical Characteristics at $T_a=25^\circ\text{C}$, $V_{CC}=12\text{V}$

		min	typ	max	unit
Input Bias Current	I_{IN}	-2		0	μA
	I_{INR}	-20		+20	μA
	I_{INBL}	-2		0	μA
Threshold Voltage	V_{th+}	150	200	250	mV
	V_{th-}	-250	-200	-150	mV
	V_w	30	50	100	mV
Simultaneous Lighting Width	$I_{OUT1}, I_{OUT2}, I_{OUT3}$	11	18	25	mA
Output Current	$V_{BL(L)}$	360	430	500	mV
Blanking Threshold Voltage	$V_{BL(H)}$	410	500	550	mV
	I_{OFF}			10	μA
Output Leak Current	I_{CC}	LED current excluded	3.0	3.8	mA
Current Dissipation					

Application : The case of window width 400mV typ. ($\pm 200\text{mV}$) and interstation blanking.



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