INFRARED TRANSMITTER

4 x 8 SINGLE CONTACT KEYPAD

V_{DD} 5

17 R0 OSC_{IN} 10

18 R1 OSC_{OUT} 11

1 R2

2 R3

3 R4

6 R5

7 R6

8 R7

12 C0

13 C1

14 C2

15 C3

9 MS

MM58250

V_{SS}

16

CERAMIC RESONATOR

RES 1 CSB 455A

C1 120 pF

C2 120 pF

R1 68Ω

IR_{OUT} 4

R2 3.9Ω

C3 1000µF

IRD1 XC-880-B

IRD2 XC-880-B

Q1 2N6714

B1 +9V

ELECTRICAL CHARACTERISTICS

PARAMETER	CONDITIONS	TYP	MAX	UNITS
Supply Voltage Supply Current (Active) Oscillator Frequency*		 455	10 5	V mA kHz
Output Voltage Logic "0" Logic "1"	150 μA Sink 10mA Source		0.6	V V
Output Current	$V_{DD} - 1.4V$		−20	mA
Input Levels Logic "0" Logic "1"	MS = 0, $4.5 \leq V_{DD} \leq 5.5$ Direct Mode		0.5	V V
Input Current R_0-R_6, MS R_7	MS = 0, $4.5V \leq V_{DD} \leq 5.5V$ $0V \leq V_{IN} \leq V_{DD}$ $V_{IN} = 0.4V$		1.0 0.8	μA mA
Input Current R_0-R_7 MS	MS = 1, $3.0V \leq V_{DD} \leq 10V$ $V_{IN} = 0.4V$ $0V \leq V_{IN} \leq V_{DD}$		1.6 1	mA μA
Output Current Logic "1" Source "1" Source Logic "0" Sink "0" Sink	MS = 1 $V_{DD} = 3V$, $V_{OUT} = V_{DD} - 1V$ $V_{DD} = 10V$, $V_{OUT} = V_{DD} - 1V$ $V_{DD} = 3V$, $V_{OUT} = 0.4V$			μA μA μA μA
Output Current Logic "1" Logic "0"	MS = 0, $4.5V \leq V_{DD} \leq 5.5V$ $V_{OUT} = 0.4V$		1	μA μA