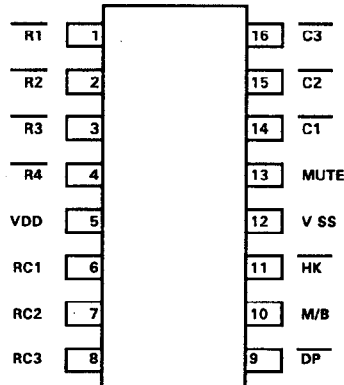


BT 9151-3

PULSE DIALER
(16 PINS)

FEATURES

- Direct telephone line operation
- Inexpensive RC oscillator
- Selectable make/break ratio
- Redial with either * or #
- 4 x 3 matrix keyboard interface
- 800 ms inter-digit pause
- Wide operating voltage range of 2.0 V to 5.5 V
- 16 pin DIP package



BT 9151-3

DESCRIPTION

The BT 9151-3 is a monolithic cmos integrated circuit which provides all the features required for implementing pulse dialer with 32 digit redial.

ABSOLUTE MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC	SYMBOL	VALUE	UNIT
DC SUPPLY VOLTAGE	VDD	- 0.3 - 5.8	V
INPUT VOLTAGE	V _{IN}	V _{DD} +0.3,GND -0.3	V
OUTPUT VOLTAGE	V _{OUT}	V _{DD} +0.3,GND -0.3	V
POWER DISSIPATION	P _D	500	mW
OPERATING TEMPERATURE	T _a	-20 ~ +70	°C
STORAGE TEMPERATURE	T _{stg}	-40 ~ + 125	°C

ELECTRICAL CHARACTERISTICS

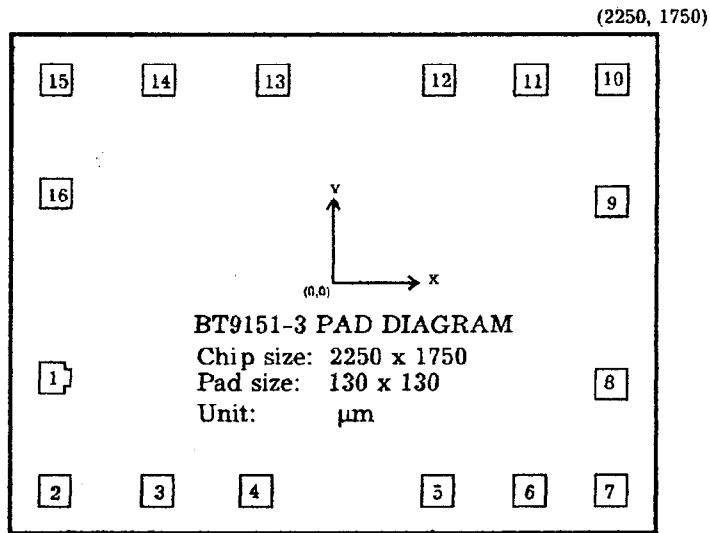
(V_{DD} = 5.0V, F_{OSC}=18KHz, T_a =25°C, UNLESS OTHERWISE SPECIFIED)

CHARACTERISTIC	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNI
SUPPLY VOLTAGE	V _{DD}		2.0		5.5	V
INPUT HIGH VOLTAGE	V _{IH}		0.8V _{DD}		V _{DD}	V
INPUT LOW VOLTAGE	V _{IL}		GND		0.2 V _{DD}	V
OUTPUT LOW CURRENT(DP,MUTE)	I _{OL}	V _{DD} =2.5V, V _O =0.5V	2.0	7.0		mA
OUTPUT HIGH CURRENT(MUTE)	I _{OH}	V _{DD} =2.5V, V _O =1.5V	1.0	6.0		mA
OUTPUT LEAKAGE CURRENT(DP)	I _{OLK}	V _{DD} =5.0V, V _O =5.0V		0.001	1.0	μA
SUPPLY OPERATION CURRENT	I _{DD}	V _{DD} =5.0V, F _{osc} = 18KHz		30	200	μA
OSCILLATOR FREQUENCY	F _{OSC}			18		KHz
ON-HOOK TIME REQUIRED TO CLEAR MEMORY	T _{KD}		30			ms
INTER-DIGITAL PAUSE	T _{IDP}			800		ms

NOTE: R_G=270KΩ, R=150KΩ, C=150pF



PAD LAYOUT



PAD LOCATION

(Unit: μm)

Pad No.	Pad Name	X	Y	Pad No.	Pad Name	X	Y
1	R1	-910	-285	9	C3	910	290
2	R2	-910	-660	10	C2	910	660
3	R3	-590	-660	11	C1	590	660
4	R4	-270	-660	12	MUTE	305	660
5	V _{DD}	305	-660	13	GND	-185	660
6	RC1	590	-660	14	HK	-590	660
7	RC2	910	-660	15	M/B	-910	660
8	RC3	910	-295	16	DP	-910	295

