

Data protocol in Q0082-T

- In each cycle of data transmission, it consists of 5 exactly the same data string with details of each string as follows:

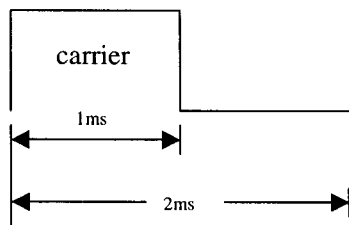
	Description	No. of cycles	Data format (binary)
A	Data Header	4	1 0 1 0
B	Pre-command code	1	1 0 1 1
C	Temperature data	1	12 bits
D	Statue data	1	4 bits
E	Checksum – total number of '1' within (C) to (D) in MOD16	1	4 bits

Note: MSB will be transmitted first for all nibbles of data

Remark:

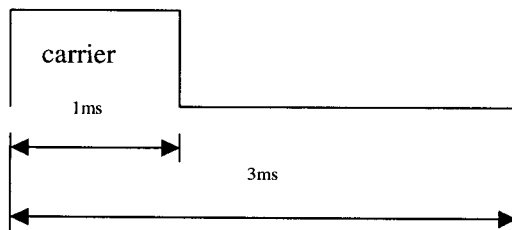
When a '0' is transmitted,

- Carrier of 433.92MHz is transmitted for 1 ms and inhibited for 1 ms

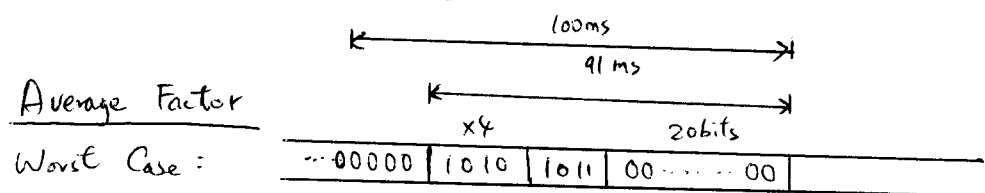


When a '1' is transmitted,

- Carrier of 433.92MHz is transmitted for 1 ms and inhibited for 2 ms



- End -



$$\text{Duty cycle} = \frac{45}{100} = 0.45$$

$$\text{Average Factor} = 20 \times \log(0.45) = -6.9 \text{ dB}$$

77

REF -23.0 dBm

AT 10 dB

MKR 471.25 msec

-54.09 dBm

PEAK

LOG

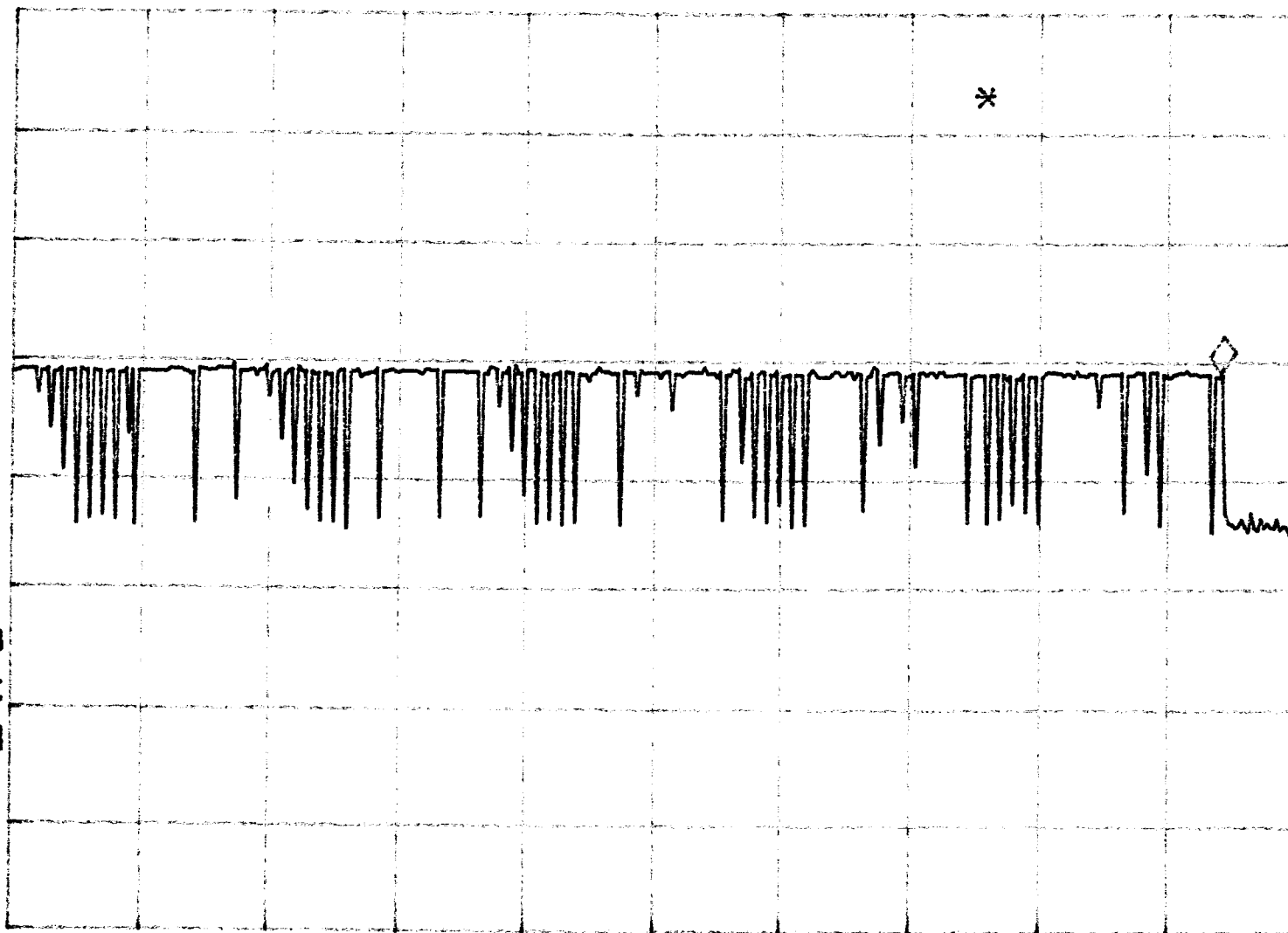
10

dB/

VA SB

SC VC

CORR



CENTER 434.029 MHz

#RES BW 3.0 MHz

#VBW 3 MHz

SPAN 0 Hz

#SWP 500 msec

hp

REF -19.0 dBm

AT 10 dB

Silent Period >100s

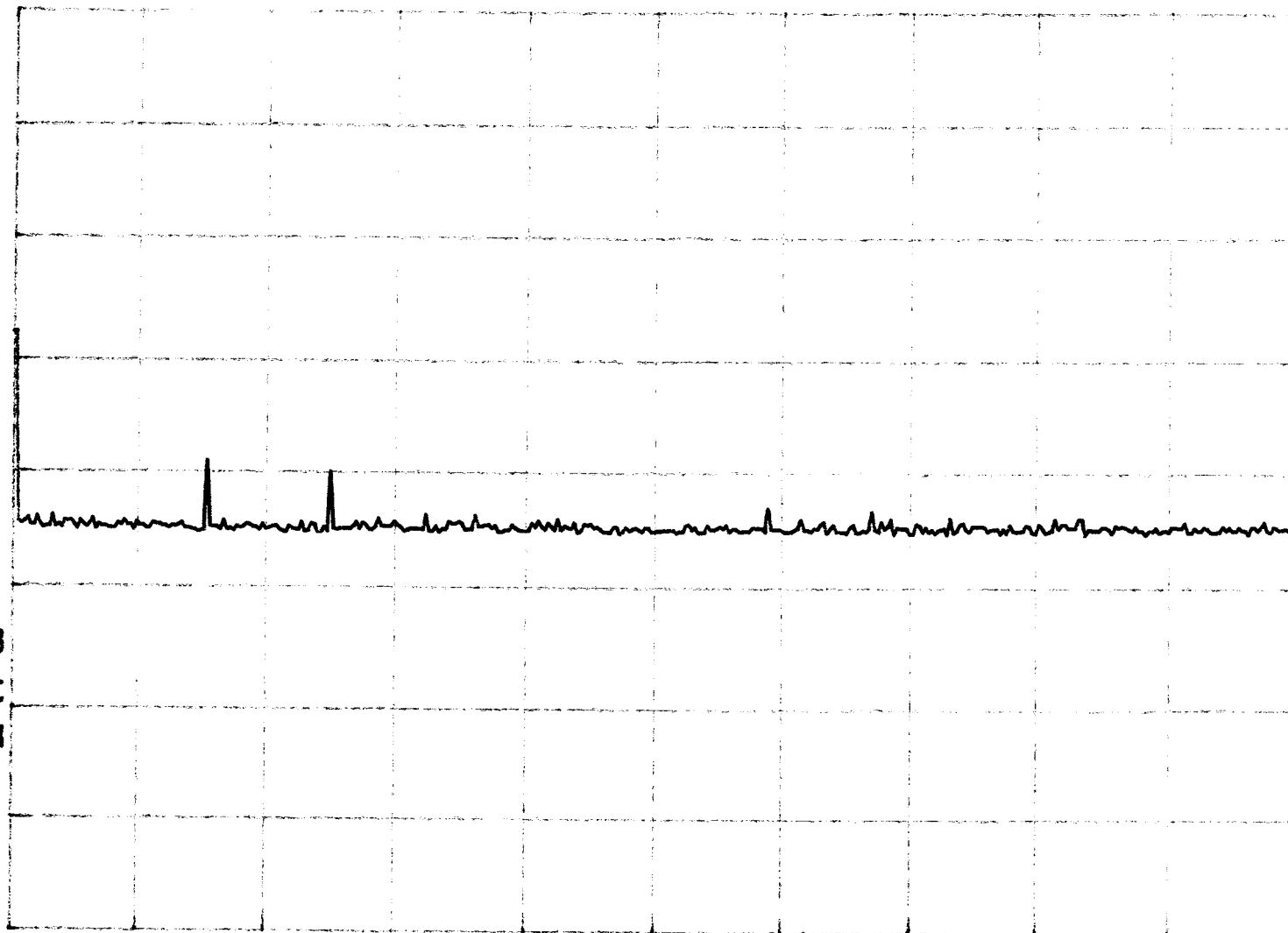
About 200s

PEAK

LOG

10

dB/



CENTER 434.029 MHz

SPAN 0 Hz

RES BW 3.0 MHz

#VBW 3 MHz

#SWP 100 sec