

VARIABLE PULSE WIDTH MODULATION

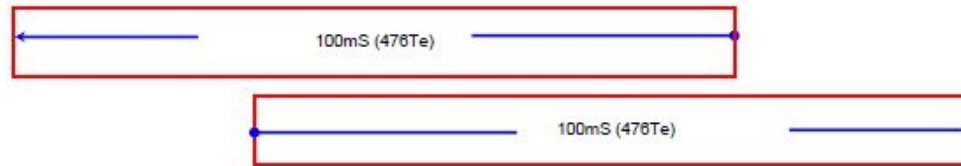
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Nominal Condition - Encrypt 50% "1"s and 50% "0"s

$T_e = 2.10E-04$ seconds

MAX, 200uS + 5%

TOTAL # of T_e 's in 100mS = 476.1904762



	WAKE UP	DEAD TIME	PREAMBLE	SYNC	ENCRYPT	FIXED	GUARD BAND	PREAMBLE	SYNC	ENCRYPT	FIXED
ON TIME	33%	0%	33%	0%	50%	50%	0%	33%	0%	50%	50%
DURATION	50.4mS (240 T_e)	51.2mS (243 T_e)	30 T_e	10 T_e	33 BITS 99 T_e	35 BITS 105 T_e	51.2mS (243 T_e)	30 T_e	10 T_e	33 BITS 99 T_e	35 BITS 105 T_e
			CODE WORD					CODE WORD			

	T_e	T_e	T_e
	ONE BIT		
	200uS	200uS	200uS
WAKE UP	1	0	0
DEAD TIME	0	0	0
PREAMBLE	1	0	0
SYNC	0	0	0
ENCRYPT	1	0 / 1	0
FIXED	1	0 / 1	0

ON	OFF	DUTY
1	2	33%
0	3	0%
1	2	33%
0	3	0%
1.5	1.5	50%
1.5	1.5	50%

# of T_e 's	TOT TIME (S)	ON TIME (S)
240	0.050400	0.016800
243	0.051030	0.000000
30	0.006300	0.002100
10	0.002100	0.000000
99	0.020790	0.010395
105	0.022050	0.011025

	Te's in CODE WORD	TOT TIME (S)	ON TIME (S)
	244	0.051240	0.023520
	Remaining T_e 's in DEAD TIME (or GUARD BAND) within 100 mS	232.1904762	0.048760
SUM	476.19	0.100	0.02352

$dB_{AVC} = 20 \text{ LOG } (T_{ON}/0.1)$ **24% ON TIME IN 100mS**
-12.57 dB