

■ ABSOLUTE MAXIMUM RATINGS

(Ta=25°C)

PARAMETER	SYMBOL	RATINGS	UNIT
Supply Voltage	V ⁺	18	V
Power Dissipation	P _D	(DIP14) 570	mW
		(DMP14) 700(note)	mW
Operating Temperature Range	T _{opr}	-40 ~ +85	°C
Storage Temperature Range	T _{stg}	-40 ~ +125	°C

(note) At on PC board

■ ELECTRICAL CHARACTERISTICS

(V⁺=+5 ~ +15V, Ta=25°C)

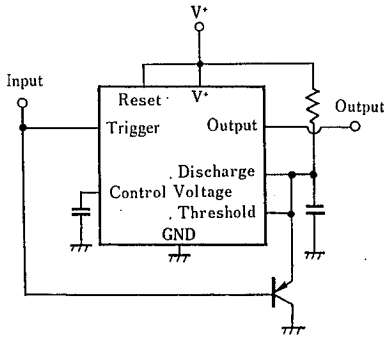
PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Operating Voltage	V ⁺		4.5	—	16	V
Operating Current (Note 2)	I _{CC}	V ⁺ =5V, R _L =∞ (Each Section)	—	3	6	mA
Operating Current (Note 2)	I _{CC}	V ⁺ =15V, R _L =∞ (Each Section)	—	10	14	mA
Threshold Voltage	V _{TH}		—	2/3	—	×V ⁺
Trigger Voltage	V _T	V ⁺ =15V	—	5	—	V
Trigger Voltage	V _T	V ⁺ =5V	—	1.67	—	V
Trigger Current	I _T		—	0.5	—	μA
Reset Voltage	V _R		0.4	0.7	1.0	V
Reset Current	I _R		—	0.1	—	mA
Threshold Current	I _T		—	0.03	0.1	μA
Control Voltage Level	V _{CL}	V ⁺ =15V	9	10	11	V
Control Voltage Level	V _{CL}	V ⁺ =5V	2.6	3.33	4	V
Output Voltage Drop (Low)	V _{OL}	V ⁺ =15V I _{SINK} =10mA	—	0.1	0.25	V
Output Voltage Drop (Low)	V _{OL}	V ⁺ =15V I _{SINK} =50mA	—	0.4	0.75	V
Output Voltage Drop (Low)	V _{OL}	V ⁺ =15V I _{SINK} =100mA	—	2	2.75	V
Output Voltage Drop (Low)	V _{OL}	V ⁺ =15V I _{SINK} =200mA	—	2.5	—	V
Output Voltage Drop (Low)	V _{OL}	V ⁺ =5V I _{SINK} =5mA	—	0.25	0.35	V
Output Voltage Drop (High)	V _{OH}	V ⁺ =15V I _{SOURCE} =200mA	—	12.5	—	V
Output Voltage Drop (High)	V _{OH}	V ⁺ =15V I _{SOURCE} =100mA	12.75	13.3	—	V
Output Voltage Drop (High)	V _{OH}	V ⁺ =15V I _{SOURCE} =40mA	—	13.5	—	V
Output Voltage Drop (High)	V _{OH}	V ⁺ =5V I _{SOURCE} =100mA	2.75	3.3	—	V

(Note 2) Operating Current when output high typically 2mA less.

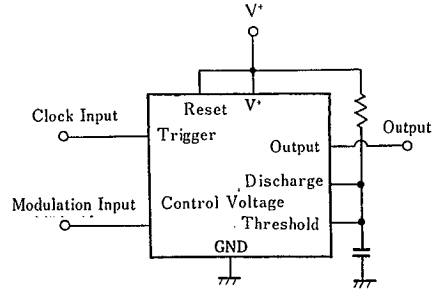
PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT	
Timing Error (Free Running)	Initial Accuracy	E _{tu}	R _A , R _B =2k~100kΩ, C=0.1μF	—	2.25	—	%
	vs. Temperature	E _{tu}	R _A , R _B =2k~100kΩ, C=0.1μF	—	150	—	ppm/°C
Timing Error (Monostable)	Initial Accuracy	E _{tm}	R _A , R _B =2k~100kΩ, C=0.1μF	—	0.3	—	%/Volt
	vs. Temperature	E _{tm}	R _A , R _B =2k~100kΩ, C=0.1μF	—	0.75	—	%
Matching Characteristics Between Each Section	Initial Accuracy	E _{tm}	R _A , R _B =2k~100kΩ, C=0.1μF	—	50	—	ppm/°C
	vs. Operating Voltage	E _{tm}	R _A , R _B =2k~100kΩ, C=0.1μF	—	0.1	—	%/Volt
				—	0.5	1	%
				—	±10	—	ppm/°C
				—	0.2	0.5	%/Volt

(Note 3): Tested at V⁺=+5V~+15V

■ TYPICAL APPLICATION



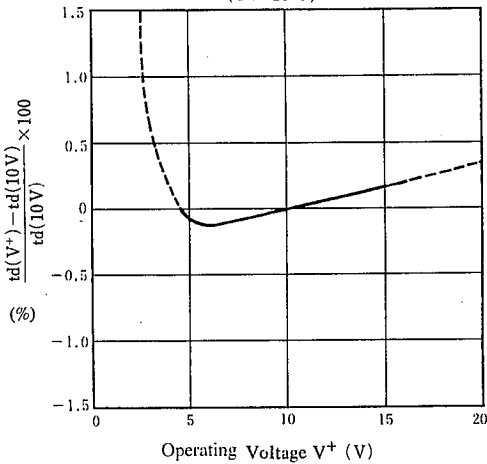
Missing pulse Detection Circuit



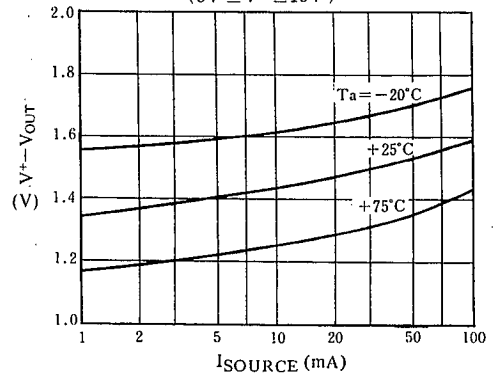
Pulse Width Modulation Circuit

■ TYPICAL CHARACTERISTICS

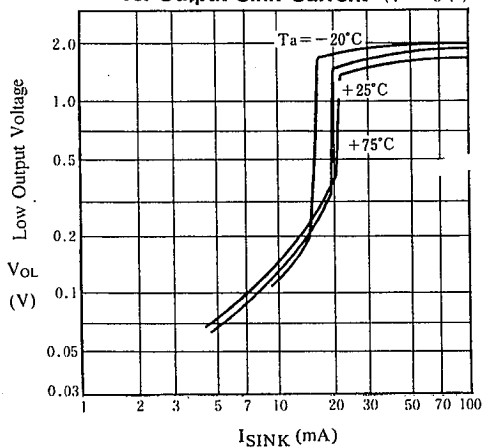
Delay Time vs. Operating Voltage
($T_a = 25^\circ\text{C}$)



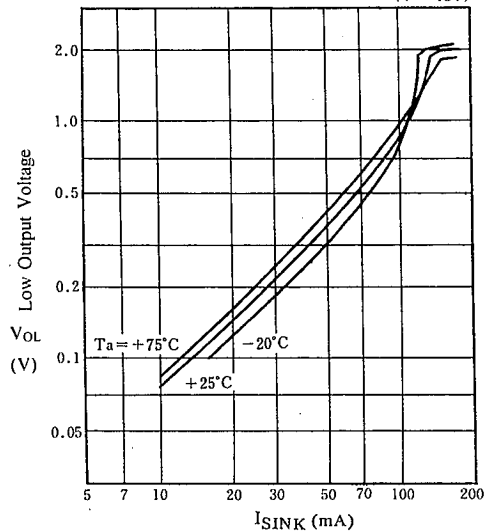
High Output Voltage Drop
vs. Output Source Current
($5V \leq V^+ \leq 15V$)



Low Output Voltage
vs. Output Sink Current ($V^+ = 5V$)

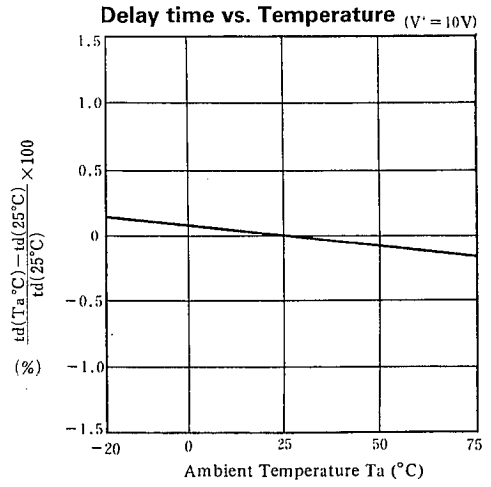
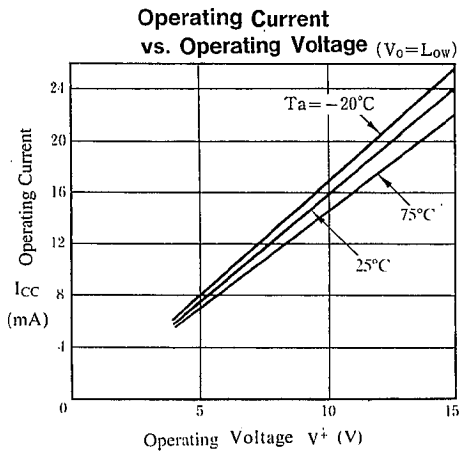


Low Output Voltage
vs. Output Sink Current ($V^+ = 15V$)



6

■ TYPICAL CHARACTERISTICS



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[CAUTION]

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