

TOY RADIO CONTROL DEMODULATOR

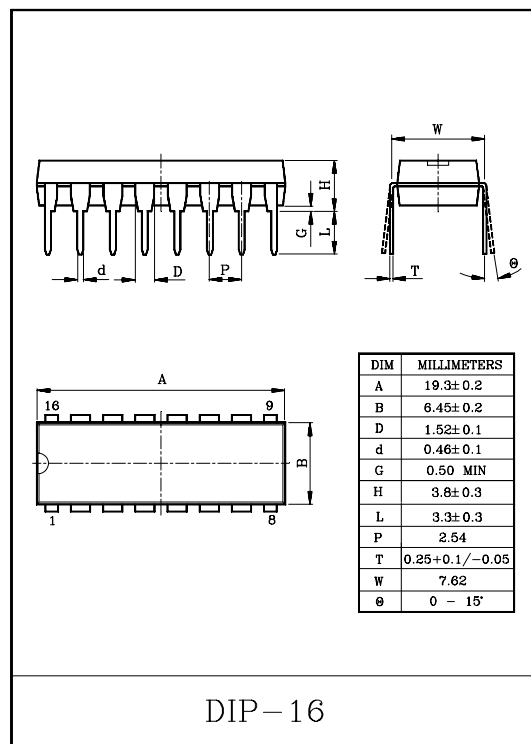
FEATURES

- Includes Regulator, Amp, Integrator.
- Wide Operating Supply Voltage Range.
($V_{CC}=3.5\sim 12V_{DC}$)
- Low Quiescent Circuit Current.
- Minimum Number of External Parts Required

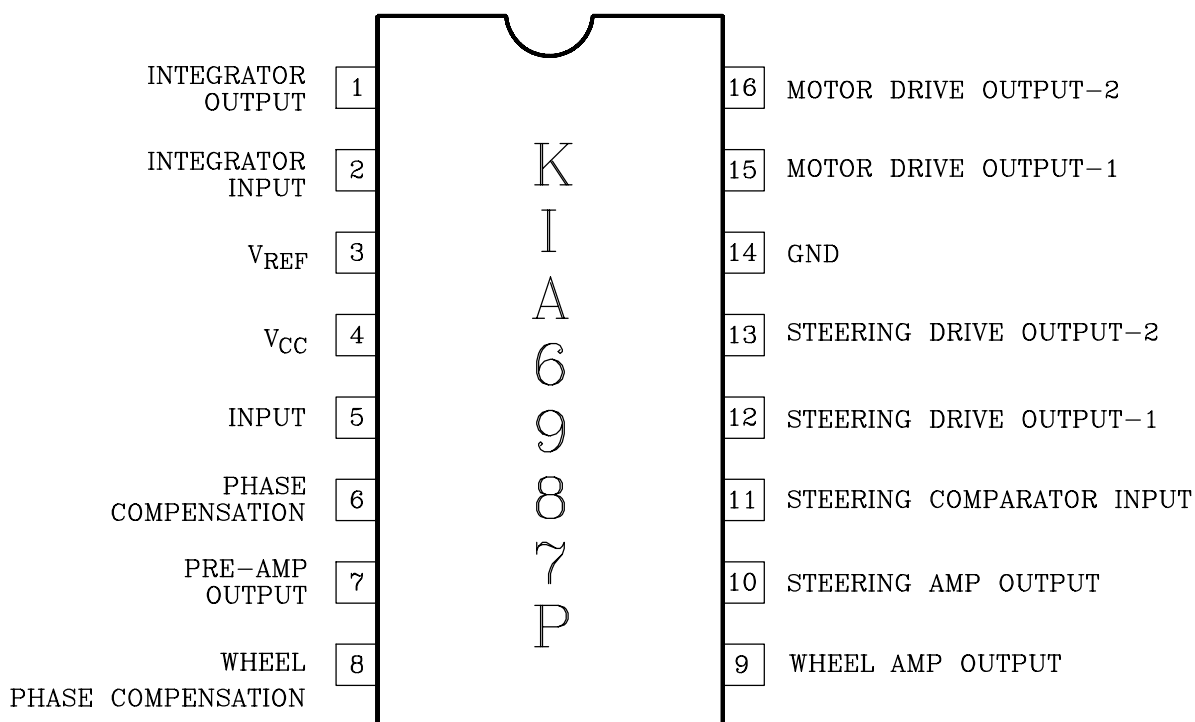
MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Supply Voltage	V_{CC}	15	V
Power Dissipation (Note)	P_D	700	mW
12, 13, 15, 16 pin Current	I_D	15	mA
12, 13, 15, 16 pin Voltage	V_D	15	V
V_{REF} Output Current	I_O	10	mA
Operating Temperature	T_{opr}	$-20\sim 75$	$^{\circ}\text{C}$
Storage Temperature	T_{stg}	$-40\sim \pm 125$	$^{\circ}\text{C}$

Note : Derated above $T_a=25^{\circ}\text{C}$ in the proportion of $6\text{mW}/^{\circ}\text{C}$.



PIN CONNECTION (TOP VIEW)



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ELECTRICAL CHARACTERISTICS ($V_{CC}=6V$, $T_a=25^{\circ}C$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Supply Voltage Range	V_{OPR}	–	3.5	6.0	12.0	V
Referance Output Voltage	V_{ref}	$V_{CC}=3.5\sim 12V$	2.6	2.8	3.0	V
Reference Regulation	ΔV_{ref}	$I_O=0\sim 8mA$	–	20	–	mV
Quiescent Current	I_{CCQ}	2, 3 Pin OFF	–	–	33	mA
Iout Output Voltage	V_{11}	$V_3=3V$	1.31	–	1.69	V
MOTOR DRIVE-1 Output Current	I_{15}	400Hz & Duty=25% $V_{15}=GND$	5	–	–	mA
MOTOR DRIVE-2 Output Current	I_{16}	1kHz & Duty=25% $V_{16}=GND$	5	–	–	mA
STEERING DRIVE-1 Output Current	I_{12}	400Hz & Duty=25% $V_{12}=3.8V$	10	–	–	mA
STEERING DRIVE-2 Output Current	I_{13}	400Hz & Duty=75% $V_{13}=3.8V$	10	–	–	mA
Input Sensitiving	V_{IN}	–	–	–	10	mV

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BLOCK DIAGRAM / TEST CIRCUIT

