

# BA6220

# LINEAR INTEGRATED CIRCUIT

## GENERAL USE ELECTRONIC GOVERNOR

### DESCRIPTION

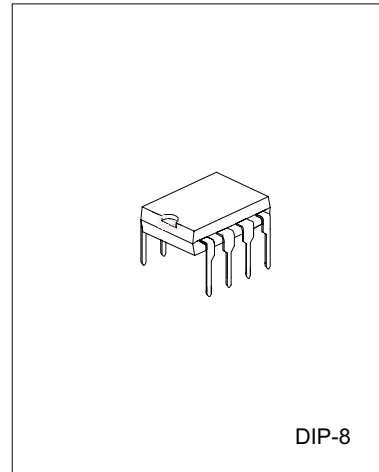
The Contek BA6220 is a monolithic integrated circuit , developed for speed control of general use DC motors.

### FEATURES

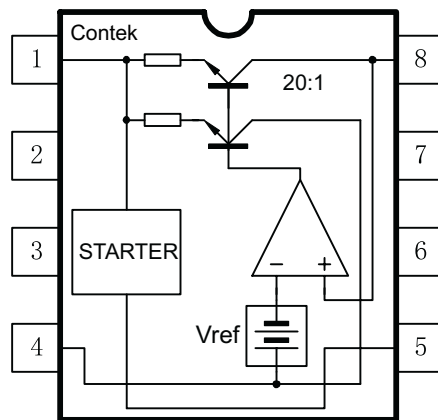
- \*Wide range of working power supply voltage range (  $V_{cc} = 3.5V - 16V$ ).
- \*Very large starting torque at the low voltage.
- \*Large permissible loss due to effective utilization of substrate radiation.
- \*Usable for various DC motors by means of changing constants of the external components.

### APPLICATION

- \*Radio cassette tape recorders



### BLOCK DIAGRAM



Contek Microelectronics Co.,Ltd.

<http://www.contek-ic.com> E-mail:sales@contek-ic.com

# BA6220

# LINEAR INTEGRATED CIRCUIT

## ABSOLUTE MAXIMUM RATINGS(TA=25 C )

PARAMETER	SYMBOL	VALUE	UNIT
Supply Voltage	Vcc	18	V
Power Dissipation(note 1)	Pd	1.4	W
Operating Temperature	Topr	-25 to 75	C
Storage Temperature	Tstg	-55 to 125	C

Note 1: PCB(Copper-surfaced) 9cm<sup>2</sup> , T 1.0mm.

## RECOMMENDED OPERATING CONDITIONS(TA=25 C )

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP.	MAX	UNIT
Operating Supply Voltage	Vcc	Loader: 8g-cm	3.5		16	V

## ELECTRICAL CHARACTERISTICS(TA=25 C ,VCC=12V)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP.	MAX	UNIT	TEST CIRCUIT
Bias Current	I4	RM=180Ω	0.5	0.8	1.2	mA	Fig.d
Output Saturate Voltage	Vsat	Vcc=4.2V,RM=4.4Ω		1.5	2.0	V	Fig.c
Reference Voltage	Vref	IM=10mA	1.10	1.27	1.40	V	Fig.a
Current Ratio	K	RM=33 - 44Ω	18	20	22		Fig.b
Volatge Feature of Reference Voltage	$\Delta V_{ref}/V_{ref}/\Delta V_{cc}$	IM=100mA, Vcc=6.3 - 16V		0.06		%/V	Fig.a
Volatge Feature of Current Ratio	$\Delta K/K/\Delta V_{cc}$	IM=100mA, Vcc=6.3 - 16V		0.4		%/V	Fig.b
Current Feature of Reference Voltage	$\Delta V_{ref}/V_{ref}/\Delta I_M$	IM=30 - 200mA		-0.02		%/mA	Fig.a
Current Feature of Current Ratio	$\Delta K/K/\Delta I_M$	IM=30 - 200mA		-0.02		%/mA	Fig.b
Temperature Feature of Reference Voltage	$\Delta V_{ref}/V_{ref}/\Delta T_a$	IM=100mA, Ta=-25 - 75 C		0.01		%/ C	Fig.a
Temperature Feature of Current ratio	$\Delta K/K/\Delta T_a$	IM=100mA, Ta=-25 - 75 C		0.01		%/ C	Fig.b



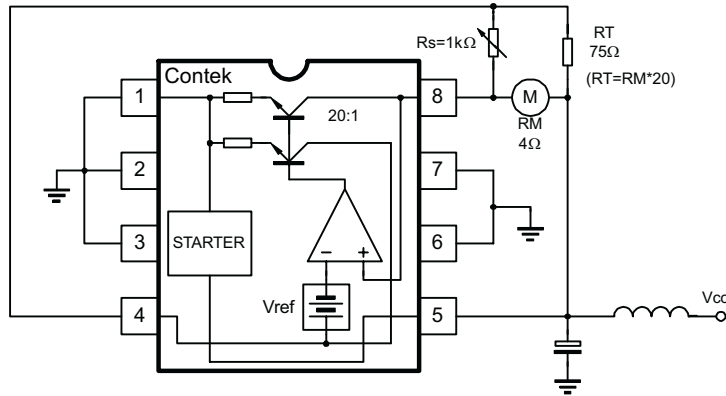
Contek Microelectronics Co.,Ltd.

<http://www.contek-ic.com> E-mail:sales@contek-ic.com

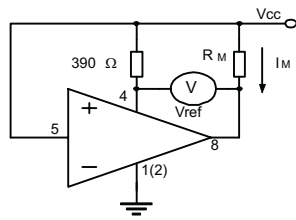
# BA6220

# LINEAR INTEGRATED CIRCUIT

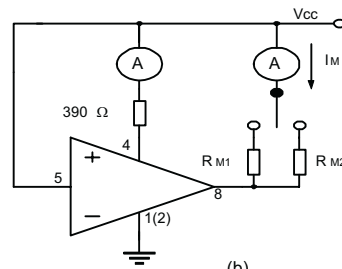
## APPLICATION CIRCUIT



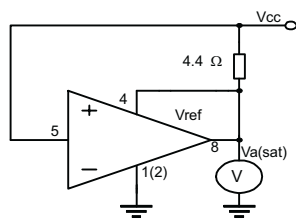
## TEST CIRCUIT



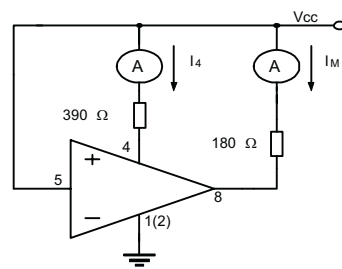
(a)



(b)



(c)



(d)



Contek Microelectronics Co.,Ltd.

<http://www.contek-ic.com> E-mail:sales@contek-ic.com