TOSHIBA TA8300F

TENTATIVE

TOSHIBA BIPOLAR LINEAR INTEGRATED CIRCUIT SILICON MONOLITHIC

TA8300F

MOTOR DRIVER FOR CAMERA

TA8300F is Multi Chip IC incorporates 6 low saturation discrete transistors which equipped bias resistor. This IC is suitable for a camera use motor drive applications.

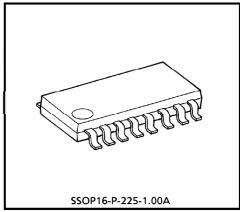
FEATURES

• Suitable for high efficiency motor drive circuit.

Built-in Bias Resistor : R = 10kΩ
 Small package sealed : SSOP16

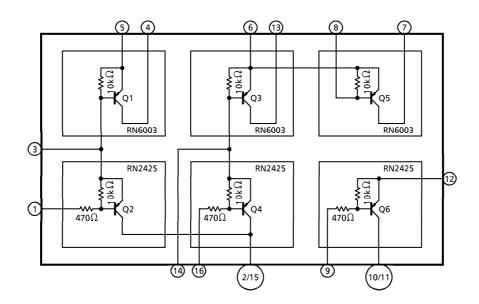
Low saturation voltage

H-bridge (only upper side)



Weight: 0.14g (Typ.)

BLOCK DIAGRAM



980910EBA2

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FUNCTION DESCRIPTION ON EACH TERMINAL

PIN No.	FUNCTION				
1	Tr. Q2	Input Terminal			
2	Tr. Q2, Q4	Output Terminal			
3	Tr. Q1	Input Terminal			
4	Tr. Q1	Output Terminal			
5	Tr. Q1	Supply Voltage			
6	Tr. Q3, Q5	Supply Voltage			
7	Tr. Q5	Output Terminal			
8	Tr. Q5	Input Terminal			
9	Tr. Q6	Input Terminal			
10	Tr. Q6	Output Terminal			
11	Tr. Q6	Output Terminal			
12	Tr. Q6	Supply Voltage			
13	Tr. Q3	Output Terminal			
14	Tr. Q3	Input Terminal			
15	Tr. Q2, Q4	Output Terminal			
16	Tr. Q4	Input Terminal			

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Supply Voltage	V _{CC}	7.0	V
	V _{CBO}	7.0	V
Breakdown Voltage	VCEO	7.0	V
	V _{EBO}	5.0	V
Output Current	IOUT	0.8	Α
Base Current	Ι _Β	0.4	Α
Power Dissipation	P _D 490		mW
Junction Temperature	Tj	j 150	
Operating Temperature	T _{opr}	- 20~60	°C
Storage Temperature	T _{stg}	- 55∼150	°C

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ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	MEASURING Tr	TEST CIR- CUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Current Gain	h _{FE 1}	RN6003	_	$V_{CE} = -2V$, $I_{C} = -500$ mA	100	400	_	
	h _{FE 2}	RN2425	_	$V_{CE} = -1V$, $I_{C} = -100$ mA	100	_	_	
Saturation	V _{CE} 1	RN6003	_	$I_C = -500 \text{mA}, I_B = -50 \text{mA}$	- 0.5	_	_	٧
Voltage	V _{CE 2}	RN2425	_	$I_C = -50 \text{mA}, I_B = -1 \text{mA}$	- 0.5	_	_	V
Leakage Current	lOFF	RN6003	-	V _{CC} = 7V	_	_	1.0	μΑ
		RN2425						
Input Resistance	R ₁	RN6003	_		7	10	13	kΩ
	R ₂	RN2425	_		0.329	0.47	0.61	kΩ
Resistance Ratio	R ₂ ′	RN2425	_		0.042	_	0.051	
Transition	f _{T1}	RN6003	_	$V_{CE} = -2V$, $I_{C} = -500$ mA	_	120	_	MHz
Frequency	f _{T2}	RN2425	_	$V_{CE} = -5V$, $I_{C} = -100$ mA	_	200	_	MHz

TOSHIBA TA8300F

OUTLINE DRAWING SSOP16-P-225-1.00A Unit:mm 0.6TYP 8.7MAX 8.2±0.2 0.525±0.2

Weight: 0.14g (Typ.)