

TOSHIBA

TA8300F

TENTATIVE TOSHIBA BIPOLAR LINEAR INTEGRATED CIRCUIT SILICON MONOLITHIC

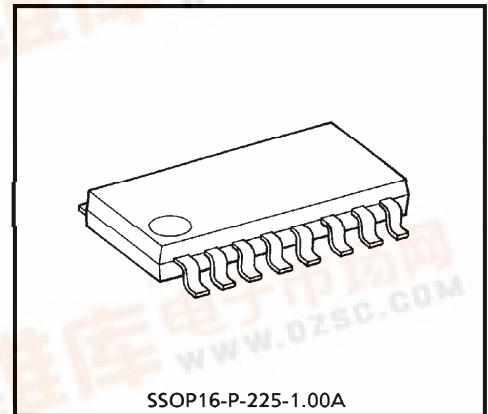
TA8300F

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

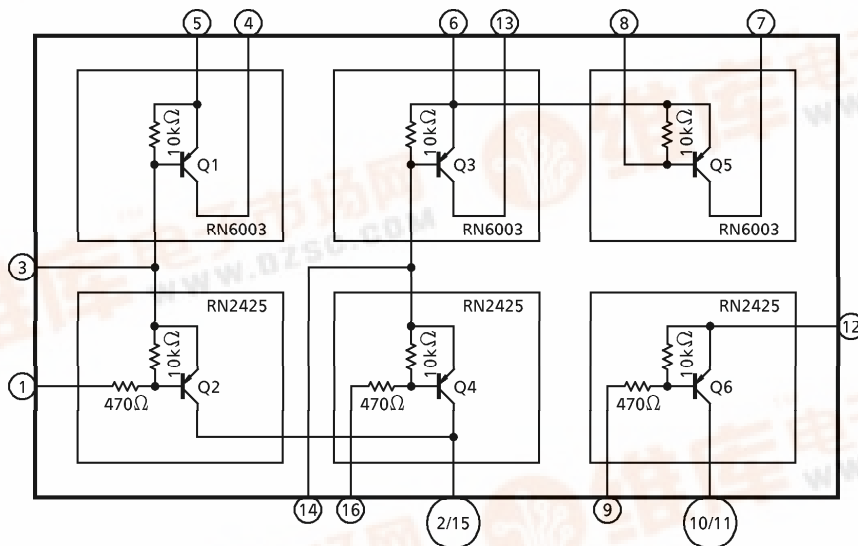
- Suitable for high efficiency motor drive circuit.
- Built-in Bias Resistor : $R = 10k\Omega$
- Small package sealed : SSOP16
- Low saturation voltage
- H-bridge (only upper side)



SSOP16-P-225-1.00A

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
Breakdown Voltage	V _{CB0}	7.0	V
	V _{CEO}	7.0	V
	V _{EB0}	5.0	V
Output Current	I _{OUT}	0.8	A
Base Current	I _B	0.4	A
Power Dissipation	P _D	490	mW
Junction Temperature	T _j	150	°C
Operating Temperature	T _{opr}	-20~60	°C
Storage Temperature	T _{stg}	-55~150	°C

980910EBA2'

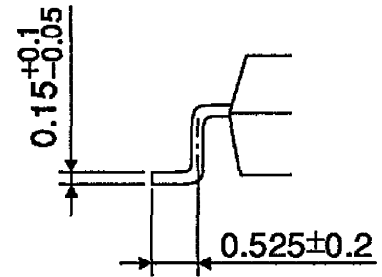
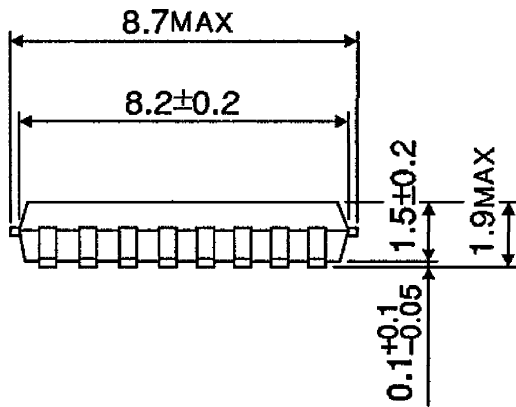
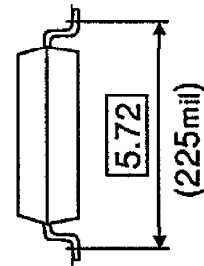
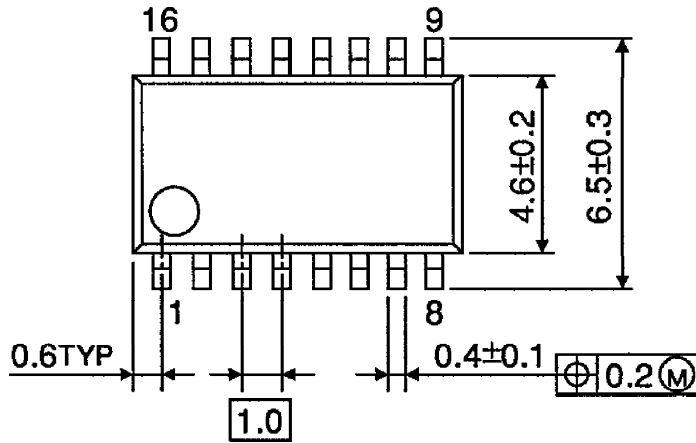
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ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	MEASURING Tr	TEST CIR- CUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Current Gain	h_{FE1}	RN6003	—	$V_{CE} = -2V, I_C = -500mA$	100	400	—	
	h_{FE2}	RN2425	—	$V_{CE} = -1V, I_C = -100mA$	100	—	—	
Saturation Voltage	V_{CE1}	RN6003	—	$I_C = -500mA, I_B = -50mA$	-0.5	—	—	V
	V_{CE2}	RN2425	—	$I_C = -50mA, I_B = -1mA$	-0.5	—	—	V
Leakage Current	I_{OFF}	RN6003	—	$V_{CC} = 7V$	—	—	1.0	μA
		RN2425						
Input Resistance	R_1	RN6003	—		7	10	13	$k\Omega$
	R_2	RN2425	—		0.329	0.47	0.61	$k\Omega$
Resistance Ratio	R_2'	RN2425	—		0.042	—	0.051	
Transition Frequency	f_{T1}	RN6003	—	$V_{CE} = -2V, I_C = -500mA$	—	120	—	MHz
	f_{T2}	RN2425	—	$V_{CE} = -5V, I_C = -100mA$	—	200	—	MHz

OUTLINE DRAWING
SSOP16-P-225-1.00A

Unit : mm



Weight : 0.14g (Typ.)