TENTATIVE

TOSHIBA BIPOLAR LINEAR INTEGRATED CIRCUIT SILICON MONOLITHIC

TA8304F

MOTOR DRIVER FOR CAMERA

TA8304F 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

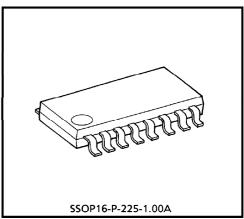
• Suitable for high efficiency motor drive circuit.

• Built-in Bias Resistor : $R = 10k\Omega$

• Small package sealed: SSOP16

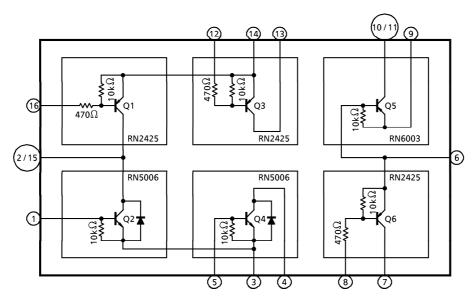
• Low saturation voltage

• H-bridge



Weight : 0.14g (Typ.)

BLOCK DIAGRAM



FUNCTION DESCRIPTION ON EACH TERMINAL

PIN No.	FUNCTION				
1	Tr. Q2	Input Terminal			
2	Tr. Q1, Q2	Output Terminal			
3	Tr. Q1, Q4	GND			
4	Tr. Q4	Output Terminal			
5	Tr. Q4	Input Terminal			
6	Tr. Q6	Supply Voltage			
7	Tr. Q6	Output Terminal			
8	Tr. Q6	Input Terminal			
9	Tr. Q5	Supply Voltage			
10	Tr. Q5	Output Terminal			
11	Tr. Q5	Output Terminal			
12	Tr. Q3	Input Terminal			
13	Tr. Q3	Output Terminal			
14	Tr. Q1, Q3	Supply Voltage			
15	Tr. Q1, Q3	Supply Voltage			
16	Tr. Q1	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	PD	490	mW
Junction Temperature	Tj	150	°C
Operating Temperature	T _{opr}	- 20~60	°C
Storage Temperature	T _{stg}	- 55∼150	°C

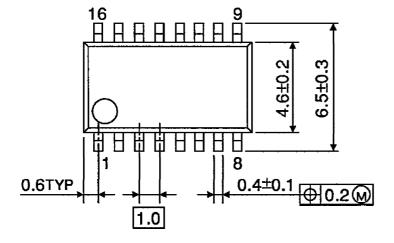
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

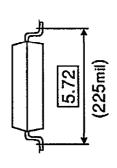
CHARACTERISTIC	SYMBOL	MEASURING Tr	TEST CIR- CUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Current Gain	h _{FE} 1	RN6003	_	$V_{CE} = -2V, I_{C} = -500 mA$	100		400	
	h _{FE 2}	RN2425	_	$V_{CE} = -1V$, $I_{C} = -100$ mA	100	_	_	
	h _{FE} 3	RN5006	_	V _{CE} = 1V, I _C = 500mA	160	_	600	
Saturation Voltage	V _{CE} 1	RN6003	_	$I_C = -500 \text{mA}, I_B = -50 \text{mA}$	- 0.5	_	_	V
	V _{CE 2}	RN2425	_	$I_C = -50 \text{mA}, I_B = -1 \text{mA}$	-0.25		_	V
	V _{CE 3}	RN5006	_	I _C = 600mA, I _B = 20mA	_	_	0.5	V
Leakage Current	lOFF		_	V _{CC} = 7V	_	_	1.0	μ A
Input Resistance	R ₁	RN6003	_		7	10	13	kΩ
	R ₂	RN2425	_		0.329	0.47	0.61	kΩ
Resistance Ratio	R'	RN2425	_		0.042	_	0.051	
Diode Forward Voltage	V _F	RN5006	_	I _F = 300mA		_	1.2	٧
Transition Frequency	f _{T1}	RN6003	_	$V_{CE} = -2V$, $I_{C} = -500$ mA	_	120	_	MHz
	f _{T2}	RN2425	_	$V_{CE} = -5V$, $I_{C} = -100$ mA	_	200	_	MHz
	f _{T3}	RN5006	_	V _{CE} = 1V, I _C = 500mA	_	140	_	MHz

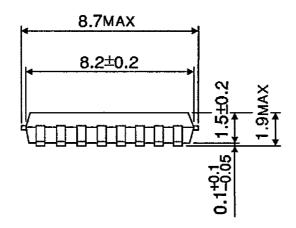
Unit: mm

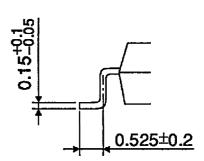
PACKAGE DIMENSIONS

SSOP16-P-225-1.00A









Weight: 0.14g (Typ.)

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