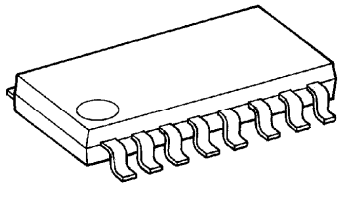
TENTATIVE TOSHIBA BIPOLAR LINEAR INTEGRATED CIRCUIT SILICON MULTI CHIP

TA8312F

MOTOR DRIVER FOR CAMERA

TA8312F is Multi Chip IC incorporates 6 low saturation discrete transistors which equipped bias resistor and Free-Wheeling diode.
This IC is suitable for a camera use motor drive applications.



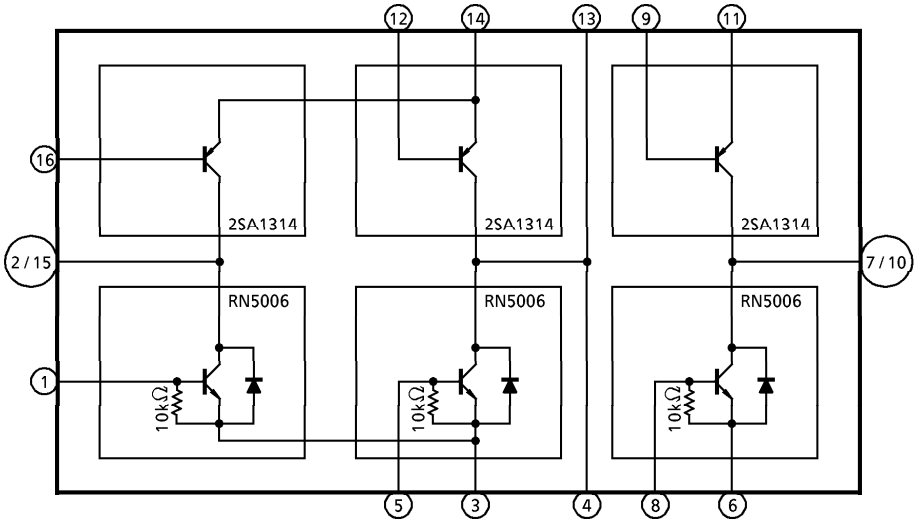
SSOP16-P-225-1.00A

Weight : 0.14g (Typ.)

FEATURES

- Suitable for high efficiency motor drive circuit.
- Built-in Bias Resistor : R = 10kΩ
- Built-in Free-Wheeling diode
- Small package sealed : SSOP16
- Low saturation voltage

BLOCK DIAGRAM



980910EBA2

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Supply Voltage	V_{CC}	10	V
Breakdown Voltage	V_{CBO}	10	V
	V_{CEO}	10	V
	V_{EBO}	6	V
Output Current	I_{OUT}	2	A
Base Current	I_B	0.4	A
Power Dissipation	P_D	330	mW
Junction Temperature	T_j	150	°C
Operating Temperature	T_{opr}	−20~60	°C
Storage Temperature	T_{stg}	−55~150	°C

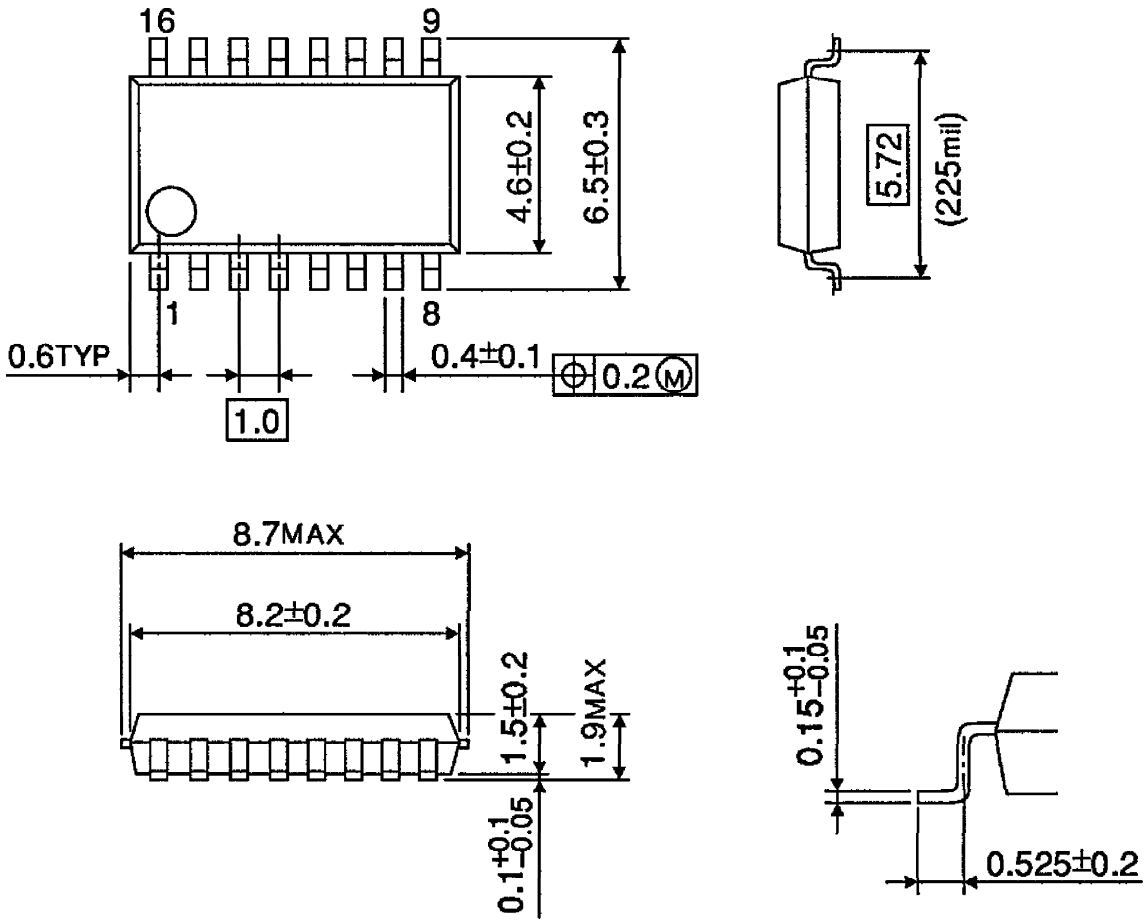
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	MEASURING Tr	TEST CIR-CUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Current Gain	$h_{FE\ 1}$	2SA1314	—	V_{CE} = −1V, I_C = −0.5A	140	—	600	
	$h_{FE\ 2}$	RN5006	—	V_{CE} = 1V, I_C = 0.5A	160	—	600	
Saturation Voltage	$V_{CE\ 1}$	2SA1314	—	I_C = −2A, I_B = −50mA	−0.5	—	—	V
	$V_{CE\ 2}$	RN5006	—	I_C = 2A, I_B = 50mA	—	—	0.5	V
Output Leak Current	I_{OFF}		—	V_{CC} = 7V	—	—	1.0	μA
Input Resistance	R	RN5006	—		7	10	13	kΩ
Diode Forward Voltage	V_F	RN5006	—	I_F = 300mA	—	0.89	1.2	V
Transition Frequency	f_{T1}	2SA1314	—	V_{CE} = −1V, I_C = −0.5A	—	140	—	MHz
	f_{T2}	RN5006	—	V_{CE} = 1V, I_C = 0.5A	—	140	—	MHz

OUTLINE DRAWING

SSOP16-P-225-1.00A

Unit : mm



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