TOSHIBA TA8317F

**TENTATIVE** 

TOSHIBA BIPOLAR LINEAR INTEGRATED CIRCUIT SILICON MULTI CHIP

# **TA8317F**

### LED DRIVER FOR CAMERA

TA8317F is Multi Chip IC incorporates 6 low saturation discrete transistors which equipped bias resistor.

This IC is suitable for a camera use LED drive applications.

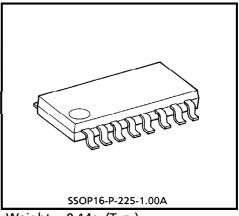
#### **FEATURES**

Suitable for LED drive circuit.

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

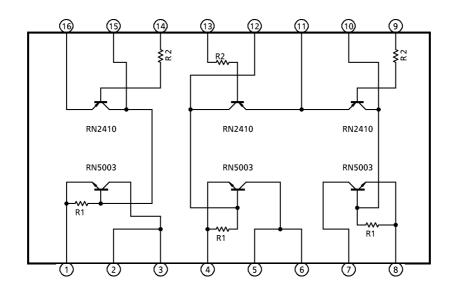
Small package sealed : SSOP16

• Low saturation voltage



Weight: 0.14g (Typ.)

#### **BLOCK DIAGRAM**



980910EBA2

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#### **MAXIMUM RATINGS** (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Supply Voltage	Vcc	7.0	V
	V <sub>CBO</sub>	10	V
Breakdown Voltage	VCEO	10	V
	V <sub>EBO</sub>	5	V
Output Current (PNP/NPN)	lout	100 / 2	mA/A
Base Current	Ι <sub>Β</sub>	0.4	Α
Power Dissipation	PD	490	mW
Junction Temperature	Tj	150	°C
Operating Temperature	T <sub>opr</sub>	- 20~60	°C
Storage Temperature	T <sub>stg</sub>	- 55~150	°C

## **ELECTRICAL CHARACTERISTICS (Ta = 25°C)**

CHARACTERISTIC	SYMBOL	MEASURING Tr	TEST CIR- CUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Current Gain	h <sub>FE</sub> 1	RN5003	_	$V_{CE} = 2V, I_{C} = 0.5A$	100	_	400	
	h <sub>FE 2</sub>	RN2410	_	$V_{CE} = 5V$ , $I_{C} = 1mA$	120	_	400	
Saturation	V <sub>sat 1</sub>	RN5003	_	$I_C = 2A$ , $I_B = 0.05A$	_	_	0.5	V
Voltage	V <sub>sat 2</sub>	RN2410	_	$I_C = 5mA, I_B = 0.25mA$	_	_	0.3	V
Transition	f <sub>T1</sub>	RN5003	_	$V_{CE} = 2V, I_{C} = 0.5 mA$	_	_	120	MHz
Frequency	f <sub>T2</sub>	RN2410	_	$V_{CE} = 10V$ , $I_C = 5mA$	_	_	200	MHz
Resistance Value	R <sub>1</sub>	RN5003	_		7	10	13	kΩ
	R <sub>2</sub>	RN2410	_		3.29	4.7	6.11	kΩ

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# **OUTLINE DRAWING** SSOP16-P-225-1.00A Unit: mm $6.5\pm0.3$ 8 0.4±0.1 0.2 0 <u>0.6TYP</u> 1.0 8.7MAX 8.2±0.2 1.9MAX 0.1+0.15

Weight: 0.14g (Typ.)

0.525±0.2