**TENTATIVE** 

TOSHIBA BIPOLAR LINEAR INTEGRATED CIRCUIT SILICON MULTI CHIP

# TA8320F

# LED DRIVER FOR CAMERA

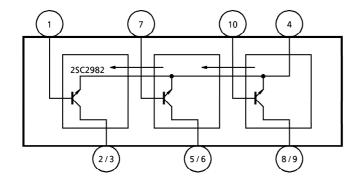
TA8320F is Multi Chip IC incorporates 3 low saturation discrete transistors.

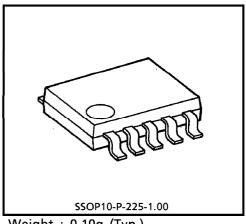
This IC is suitable for a camera use LED drive applications.

### **FEATURES**

- Suitable for LED drive circuit.
- Small package sealed: SSOP10
- Low saturation voltage
- 3-channel sink type

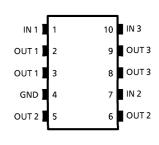
### **BLOCK DIAGRAM**





Weight: 0.10g (Typ.)

### PIN CONNECTION

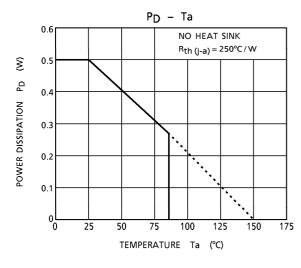


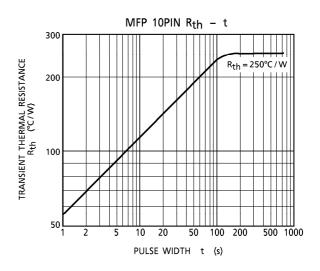
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## **MAXIMUM RATINGS** (Ta = $25^{\circ}$ C)

CHARACTERISTIC	SYMBOL	RATING	UNIT	
Supply Voltage	Vcc	10	V	
	V <sub>CBO</sub>	10	V	
Breakdown Voltage	V <sub>CEO</sub>	10	V	
	V <sub>EBO</sub>	6	V	
Output Current	lo	2	А	
Output Current	I <sub>O (peak)</sub>	(*) 4		
Base Current	Ι <sub>Β</sub>	0.4	Α	
base current	I <sub>B</sub> (peak)	(*) 0.8		
Power Dissipation	PD	590	mW	
Junction Temperature	Tj	150	°C	
Operating Temperature	T <sub>opr</sub>	<b>- 40∼85</b>	°C	
Storage Temperature	T <sub>stg</sub>	<b>- 55∼150</b>	°C	

## (\*) T = 10ms Max. and maximum duty is less than 30%





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

CHARACTERISTIC	SYMBOL	TEST CIR- CUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Current Gain	h <sub>FE</sub> (1)	_	$V_{CE} = 1V, I_{C} = 0.5A$	160	_	600	
	h <sub>FE</sub> (2)	_	$V_{CE} = 1V, I_{C} = 2.0A$	60	130	_	
Saturation Voltage	VCE (sat)	_	$I_C = 2A$ , $I_B = 50mA$	_	_	0.5	٧
Transition Frequency	f <sub>T</sub>	_	$V_{CE} = 2V, I_{C} = 0.5A$	_	150	_	MHz
Leakage Current	lOL	_	V <sub>CC</sub> = 10V		0	1.0	$\mu$ A
Base-Emitter Forward Voltage	V <sub>BE</sub>	_	$V_{CE} = 1V$ , $I_C = 2.0A$	_	0.84	1.5	V

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# PACKAGE DIMENSIONS SSOP10-P-225-1.00 Unit : mm 0.6TYP 1.0 5.7MAX 5.2±0.2 7.0+4-0.1 7

Weight: 0.10g (Typ.)

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