

TOSHIBA BIPOLAR DIGITAL INTEGRATED CIRCUIT MULTI CHIP

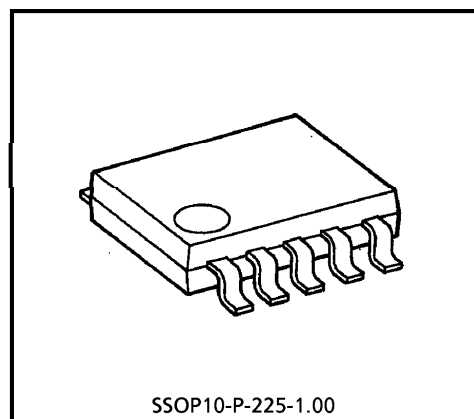
TD62M3600F

3CH LOW SATURATION VOLTAGE SOURCE DRIVER

TD62M3600F is multi chip driver IC incorporates 3 low saturation voltage discrete PNP transistors which equipped bias resistor and fly-wheeling diode.

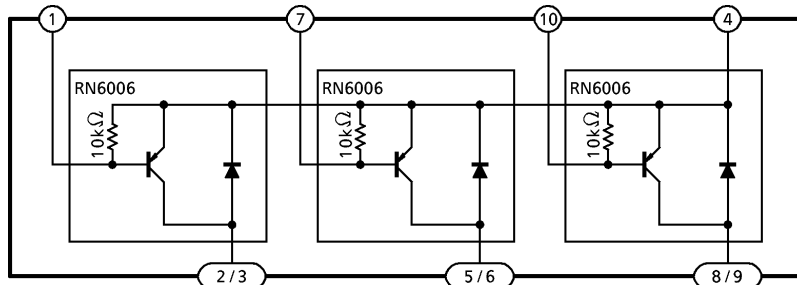
FEATURES

- Built-in fly-wheeling diode
- Built-in bias resistor : $R = 10k\Omega$ (Typ.)
- SSOP10 1mm pitch small package sealed
- Low saturation voltage
 $V_{CE(sat)} = 0.16V$ (Typ.) at $I_O = 1A$
 $V_{CE(sat)} = 0.28V$ (Typ.) at $I_O = 2A$

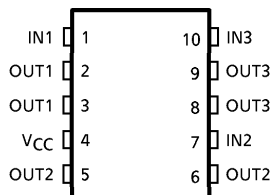


SSOP10-P-225-1.00
 Weight : 0.10g (Typ.)

BLOCK DIAGRAM



PIN CONNECTION



961001EBA2

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MAXIMUM RATINGS (Ta = 25°C)

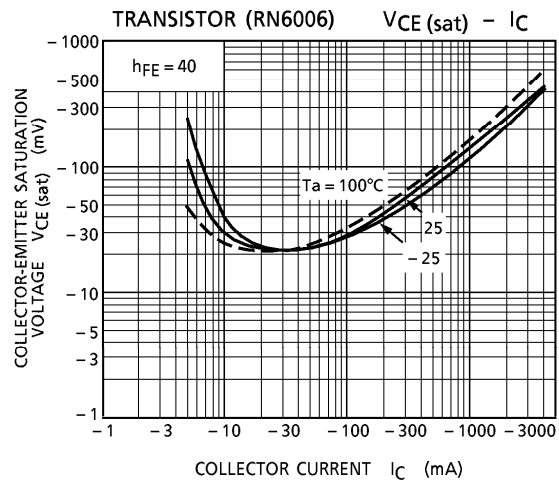
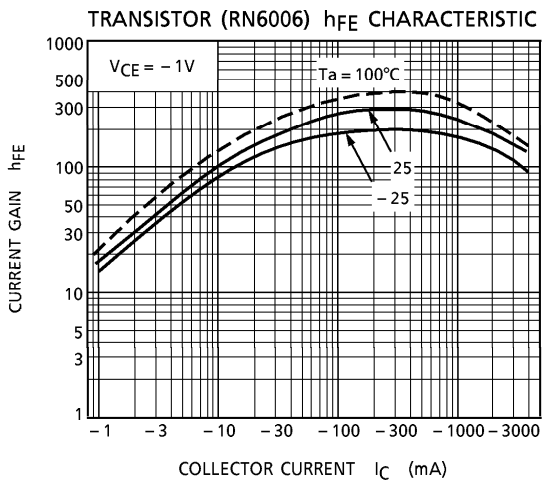
CHARACTERISTIC	SYMBOL	RATING	UNIT
Supply Voltage	V _{CC}	- 10	V
Collector-Base Voltage	V _{CB0}	- 10	V
Collector-Emitter Voltage	V _{CEO}	- 10	V
Emitter-Base Voltage	V _{EB0}	- 6	V
Output Transistor Current	I _O	- 2	A / ch
	I _O (PEAK)	- 4 (Note 1)	
Base Current	I _B	- 0.4	A
	I _B (PEAK)	- 0.8 (Note 1)	
Diode Forward Current	I _F	- 2 (Note 2)	A
Power Dissipation	P _D	590	mW
Junction Temperature	T _j	150	°C
Operating Temperature	T _{opr}	- 40~85	°C
Storage Temperature	T _{stg}	- 55~150	°C

(Note 1) T = 10ms Max. and maximum duty is less than 30%

(Note 2) T = 10ms single pulse

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CIR-CUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Current Gain	h _{FE} (1)	—	V _{CE} = 1V, I _C = 0.5A	160	—	600	—
	h _{FE} (2)	—	V _{CE} = 1V, I _C = 2.0A	60	130	—	
Saturation Voltage	V _{CE} (sat)	—	I _C = 1A, I _B = 25mA	—	0.13	0.25	V
			I _C = 2A, I _B = 50mA	—	0.25	0.50	
Transition Frequency	f _T	—	V _{CE} = 2V, I _C = 0.5A	—	150	—	MHz
Leakage Current	I _{OL}	—	V _{CC} = 10V	—	0	10	μA
Diode Forward Voltage	V _F	—	I _F = 300mA	—	0.89	1.2	V
			I _F = 450mA, 10ms	—	1.60	—	
Base-Emitter Resistance	R _{BE}	—	—	7	10	13	kΩ
Base-Emitter Forward Voltage	V _{BE}	—	V _{CE} = 1V, I _C = 2.0A	—	0.84	1.5	V

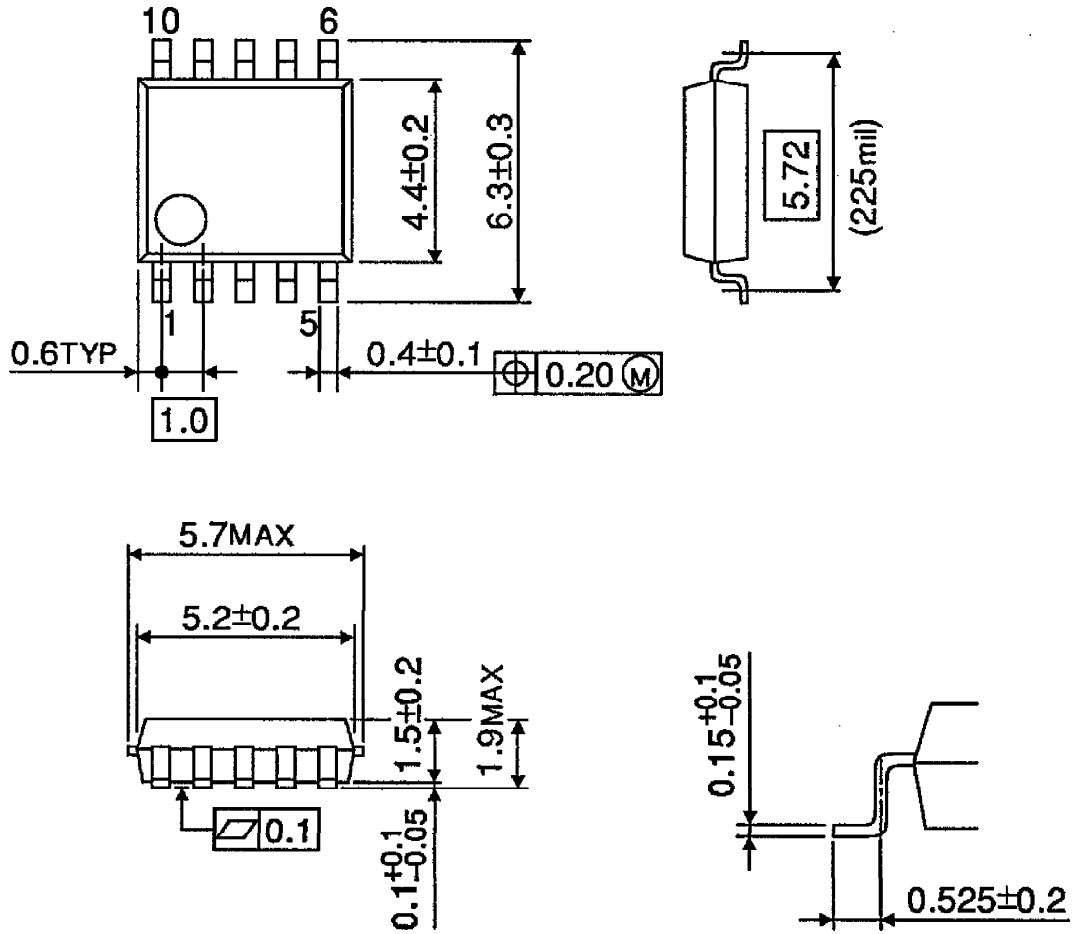


PRECAUTIONS for USING

Utmost care is necessary in the design of the output line, V_{CC} and GND line since I_C may be destroyed due to short-circuit between outputs, air contamination fault, or fault by improper grounding.

OUTLINE DRAWING
SSOP10-P-225-1.00

Unit : mm



Weight : 0.10g (Typ.)