

TOSHIBA BIPOLAR DIGITAL INTEGRATED CIRCUIT MULTI CHIP

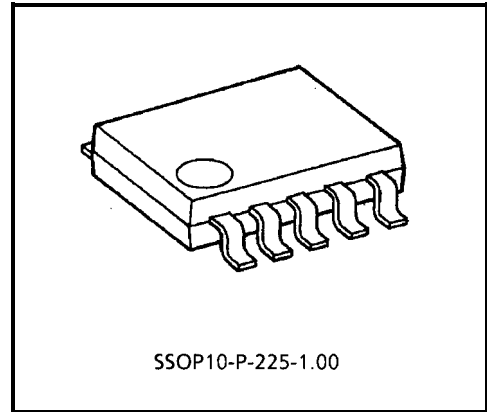
TD62M3601F

3CH LOW SATURATION VOLTAGE SOURCE DRIVER

TD62M3601F is multi chip IC incorporates 3 low saturation voltage discrete transistor (PNP).

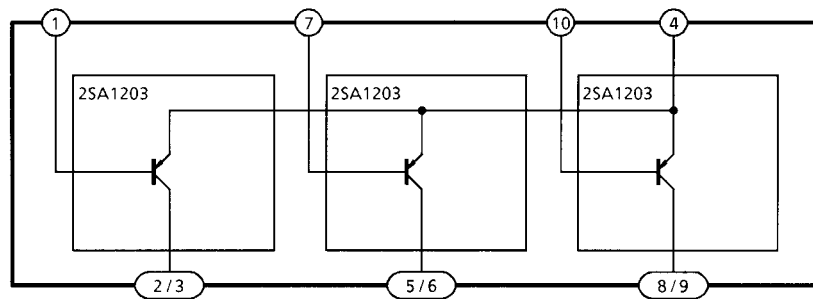
FEATURES

- Suitable for high efficiency motor drive circuit
- SSOP10 (1 mm pitch) small package sealed
- High output currentage
 $I_{OUT (AVE.)} = -1.5 A$
 $I_{OUT (PEAK)} = -3.0 A$

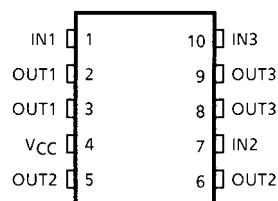


Weight: 0.10 g (Typ.)

BLOCK DIAGRAM



PIN CONNECTION (TOP VIEW)



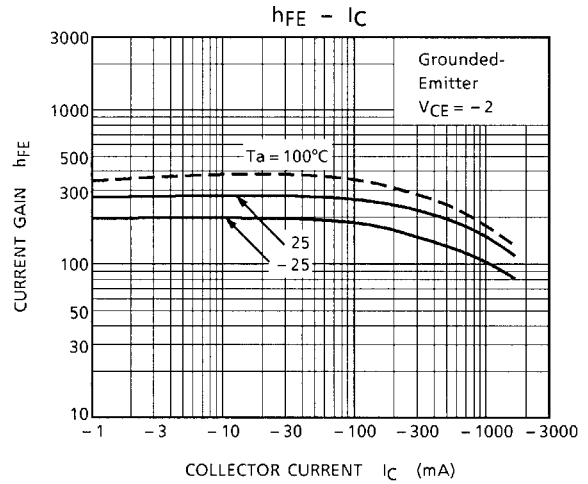
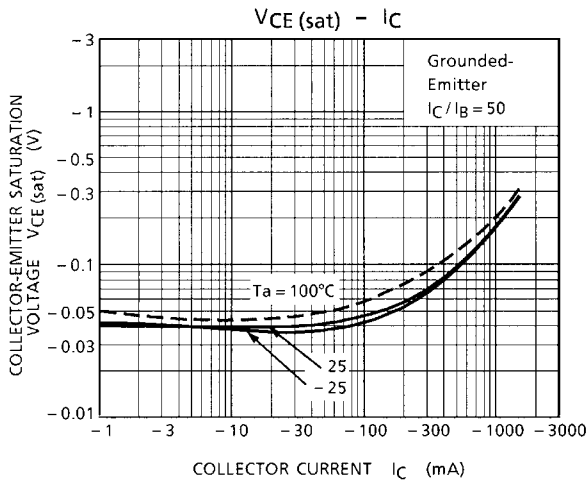
MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Supply Voltage	V _{CC}	-30	V
Collector-Base Voltage	V _{CBO}	-30	V
Collector-Emitter Voltage	V _{CEO}	-30	V
Emitter-Base Voltage	V _{EBO}	-5	V
Output Transistor Current	I _O	-1.5	A / ch
	I _O (PEAK)	-3.0 (Note)	
Base Current	I _B	-0.3	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: T = 10 ms 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 _{FE} (1)	—	V _{CE} = -2 V, I _C = -0.5 A	160	—	320	—
	h _{FE} (2)	—	V _{CE} = -2 V, I _C = -1.5 A	50	100	—	
Saturation Voltage	V _{CE} (sat)	—	I _C = -0.5 A, I _B = -10 mA	—	-0.1	-0.50	V
			I _C = -1.5 A, I _B = -30 mA	—	—	-2.0	
Transition Frequency	f _T	—	V _{CE} = -2 V, I _C = -0.5 A	—	120	—	MHz
Leakage Current	I _{OL}	—	V _{CC} = -30 V	—	0	-5	μA
Base-Emitter Forward Voltage	V _{BE}	—	V _{CE} = -2 V, I _C = -0.5 A	—	—	-1.0	V



PRECAUTIONS for USING

This IC does not integrate protection circuits such as overcurrent and overvoltage protectors.

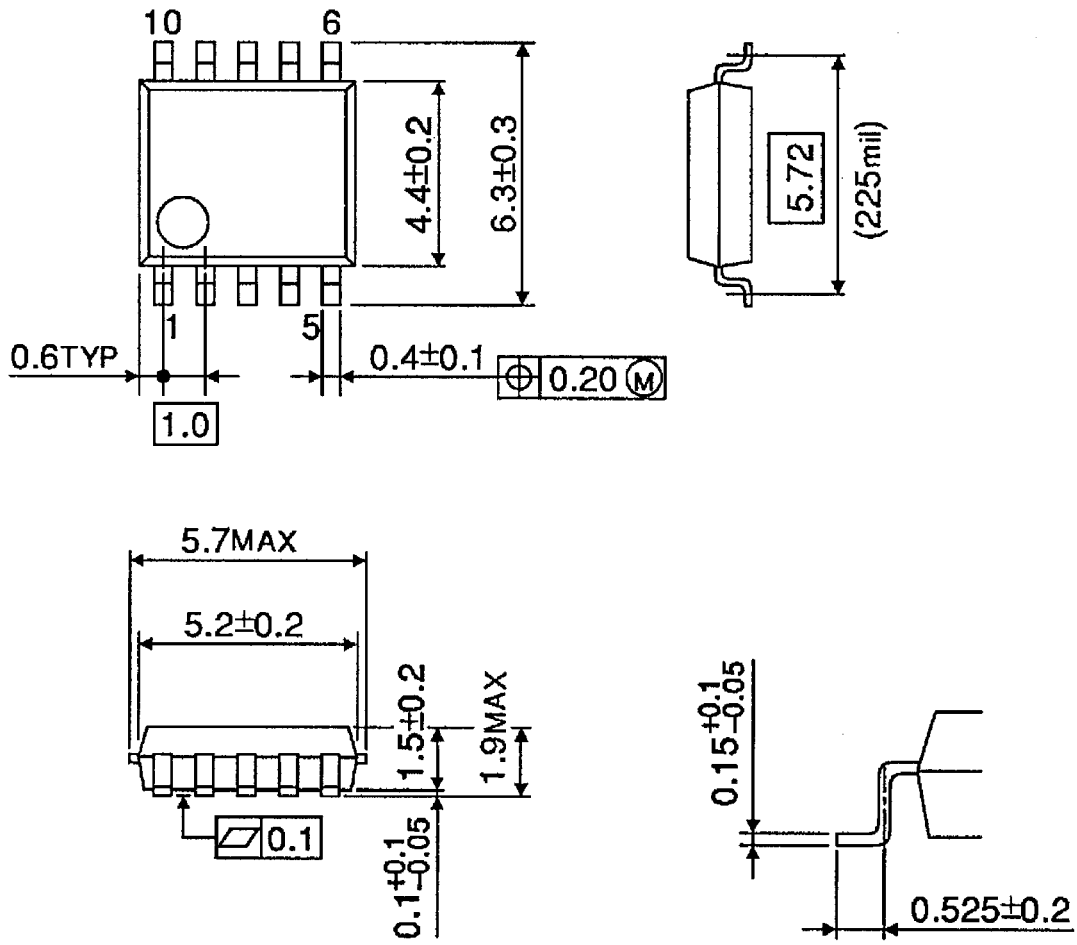
Thus, if excess current or voltage is applied to the IC, the IC may be damaged. Please design the IC so that excess current or voltage will not be applied to the IC.

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

PACKAGE DIMENSIONS

SSOP10-P-225-1.00

Unit: mm



Weight: 0.10 g (Typ.)

RESTRICTIONS ON PRODUCT USE

000707EBA

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