

TOSHIBA BIPOLAR DIGITAL INTEGRATED CIRCUIT MULTI CHIP

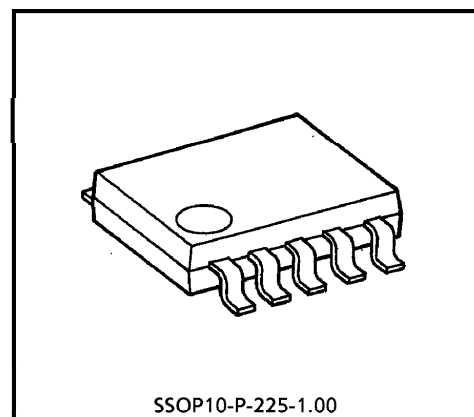
TD62M3601F

3CH LOW SATURATION VOLTAGE SOURCE DRIVER

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

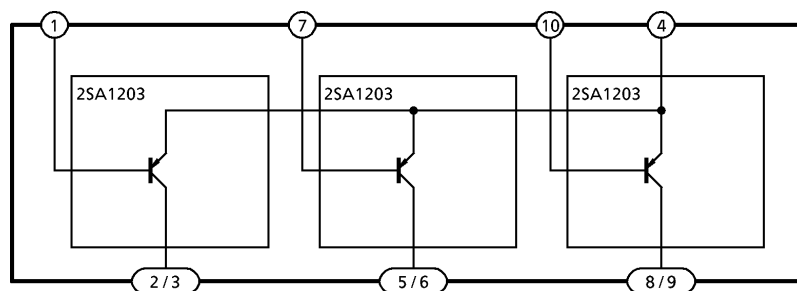
FEATURES

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

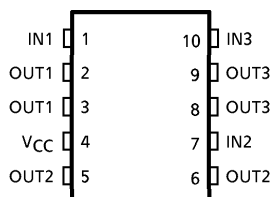


Weight : 0.10g (Typ.)

BLOCK DIAGRAM



PIN CONNECTION (TOP VIEW)



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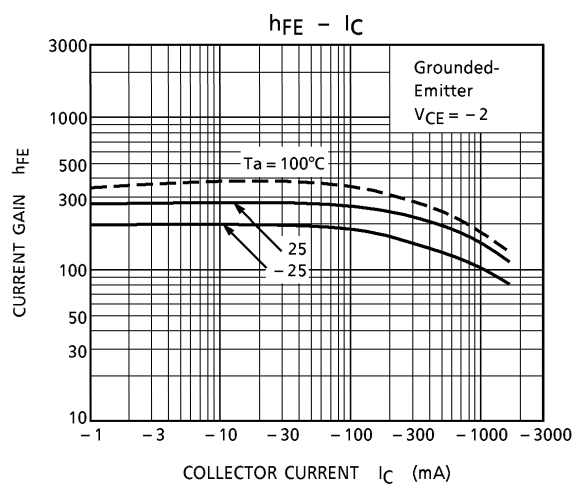
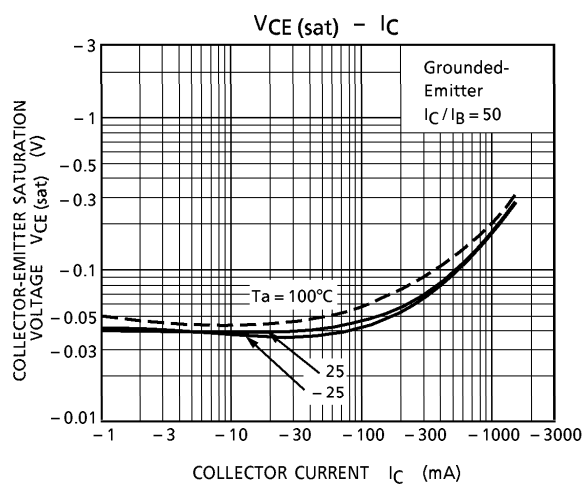
MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)

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	$^\circ\text{C}$
Operating Temperature	T_{opr}	- 40~85	$^\circ\text{C}$
Storage Temperature	T_{stg}	- 55~150	$^\circ\text{C}$

(Note) $T = 10\text{ms}$ Max. and maximum duty is less than 30%.

ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	TEST CIR- CUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Current Gain	$h_{FE}(1)$	—	$V_{CE} = -2\text{V}$, $I_C = -0.5\text{A}$	160	—	320	—
	$h_{FE}(2)$	—	$V_{CE} = -2\text{V}$, $I_C = -1.5\text{A}$	50	100	—	
Saturation Voltage	$V_{CE}(\text{sat})$	—	$I_C = -0.5\text{A}$, $I_B = -10\text{mA}$	—	- 0.1	- 0.50	V
			$I_C = -1.5\text{A}$, $I_B = -30\text{mA}$	—	—	- 2.0	
Transition Frequency	f_T	—	$V_{CE} = -2\text{V}$, $I_C = -0.5\text{A}$	—	120	—	MHz
Leakage Current	I_{OL}	—	$V_{CC} = -30\text{V}$	—	0	- 5	μA
Base-Emitter Forward Voltage	V_{BE}	—	$V_{CE} = -2\text{V}$, $I_C = -0.5\text{A}$	—	—	- 1.0	V



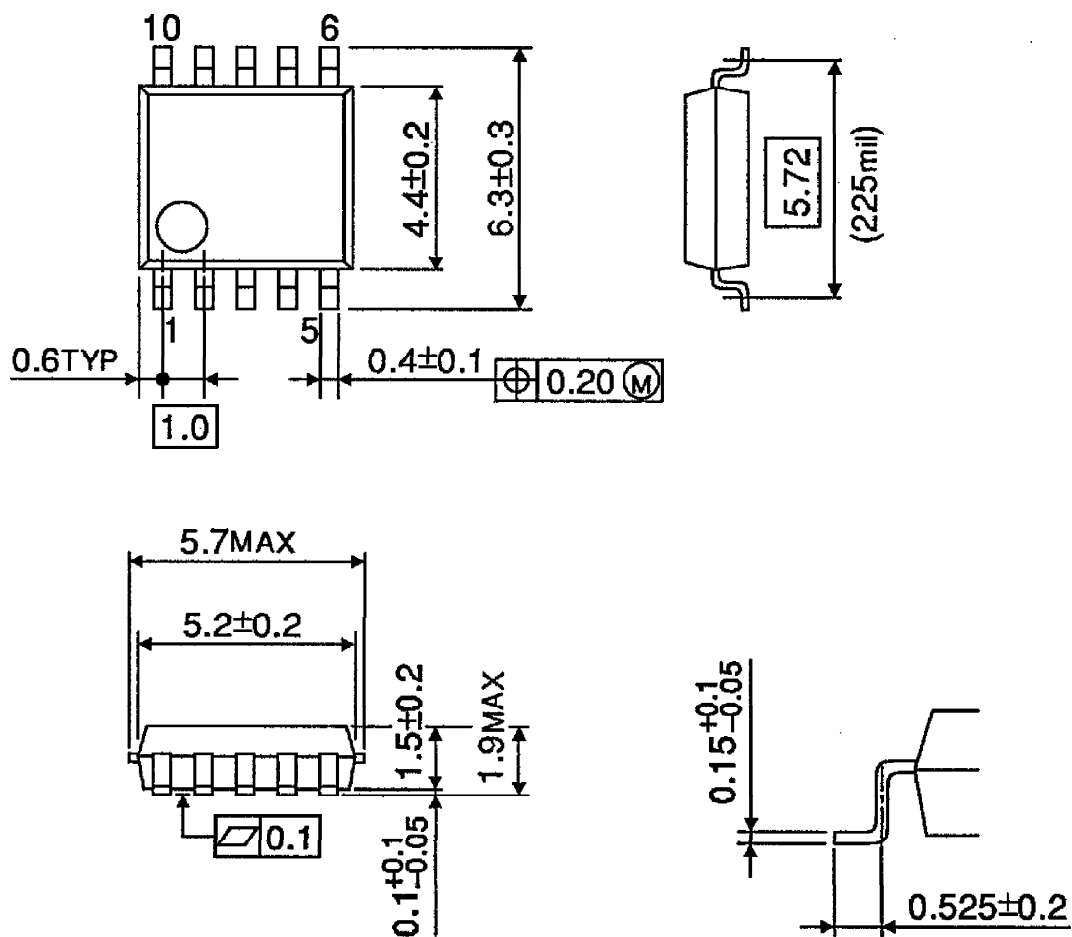
PRECAUTIONS for USING

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.

OUTLINE DRAWING

SSOP10-P-225-1.00

Unit : mm



Weight : 0.10g (Typ.)