

TOSHIBA

TD62M4601F

TOSHIBA BIPOLAR DIGITAL INTEGRATED CIRCUIT MULTI CHIP

TD62M4601F

4CH LOW SATURATION VOLTAGE SOURCE DRIVER

TD62M4601F is Multi Chip IC incorporates 4 low saturation discrete (2SA1357) transistors. This IC is suitable for a battery use motor drive and LED display module applications.

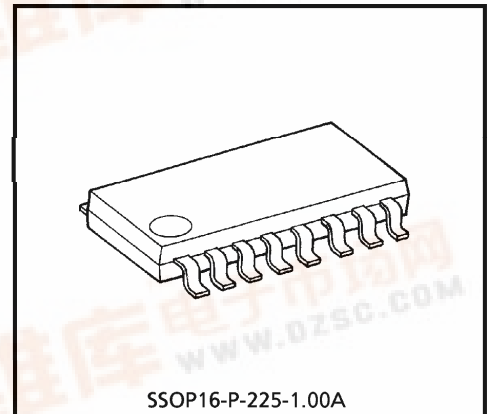
FEATURES

- Suitable for Motor drive circuit and LED display module
- External Bias Resistor
- Low Saturation Voltage

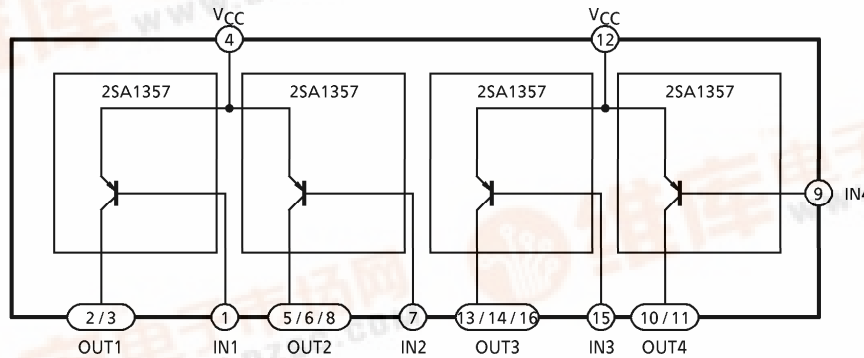
$$V_{CE(sat)} = 0.12V \text{ (Typ.) at } I_C = 1A$$

$$V_{CE(sat)} = 0.25V \text{ (Typ.) at } I_C = 2A$$

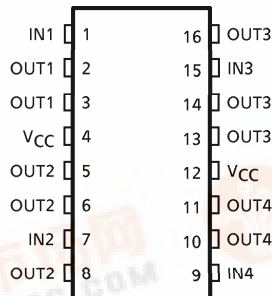
- SSOP16 1mm pitch small package sealed



BLOCK DIAGRAM

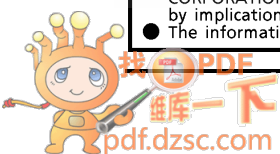


PIN CONNECTION (TOP VIEW)



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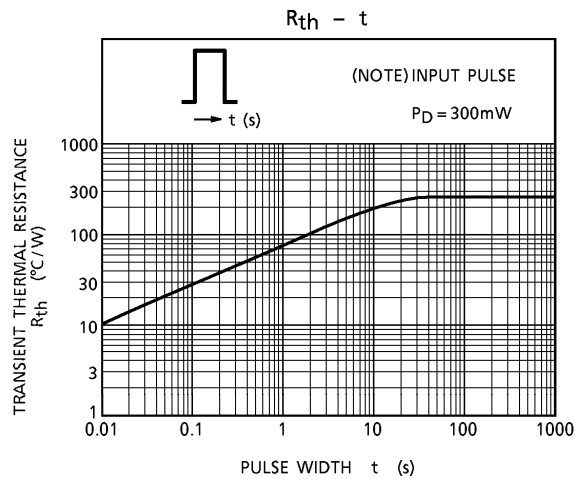
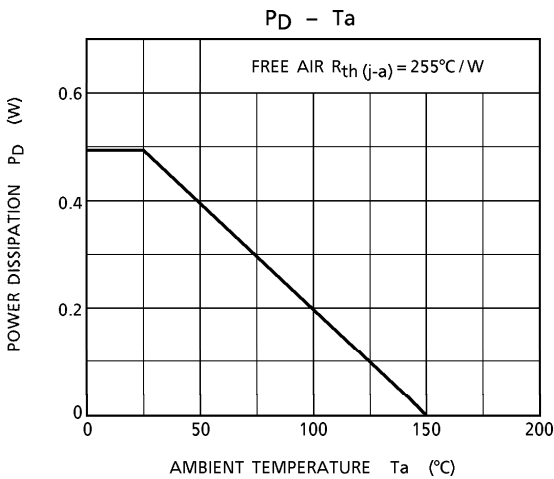
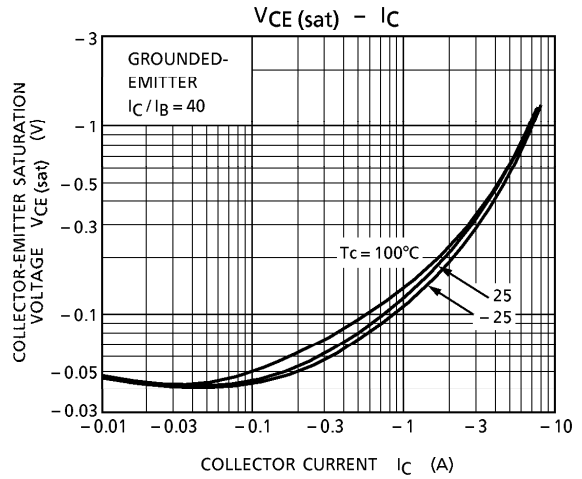
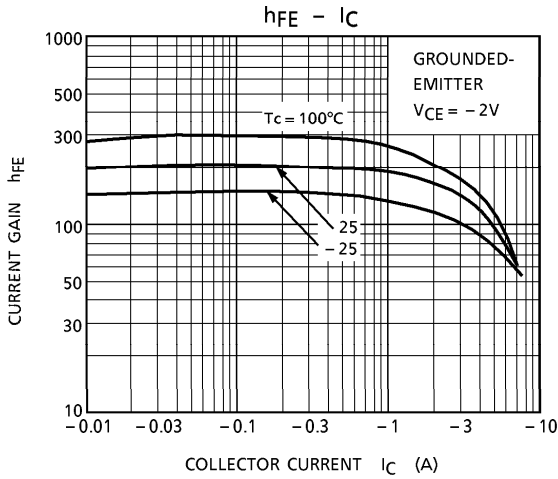
MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Supply Voltage	V _{CC}	- 20	V
Breakdown Voltage	V _{CBO}	- 20	V
	V _{CEO}	- 20	
	V _{EBO}	- 8	
Output Current	I _O	- 2	A / ch
	I _O (PEAK)	(Note) - 4	
Base Current	I _B	- 1	A
Power Dissipation	P _D	490	mW
Junction Temperature	T _j	150	°C
Operating Temperature	T _{opr}	- 40~85	°C
Storage Temperature	T _{stg}	- 55~150	°C

(Note) 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 _{FE} (1)	—	V _{CE} = -2V, I _C = -0.5A	100	—	320	—
	h _{FE} (2)	—	V _{CE} = -2V, I _C = -2.0A	70	140	—	
Saturation Voltage	V _{CE} (sat)	—	I _C = -1A, I _B = -25mA	—	-0.12	-0.25	V
			I _C = -2A, I _B = -50mA	—	-0.25	-0.50	
Transition Frequency	f _T	—	V _{CE} = -2V, I _C = -0.5A	—	100	—	MHz
Leakage Current	I _{OL}	—	V _{CC} = -20V	—	0	-10	μA
Base-Emitter Forward Voltage	V _{BE}	—	V _{CE} = -2V, I _C = 2.0A	—	-0.84	-1.5	V

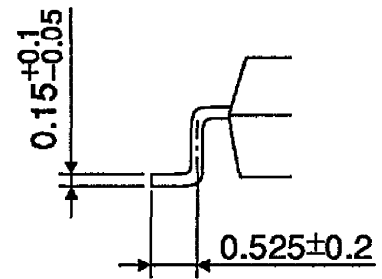
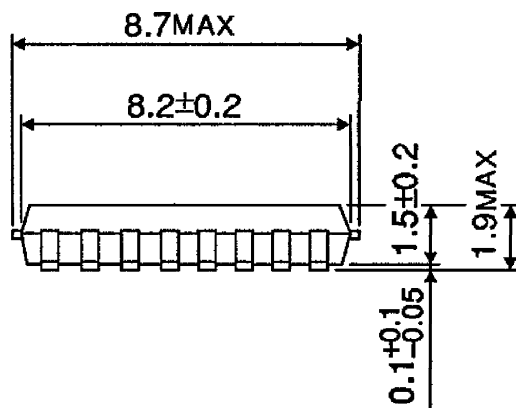
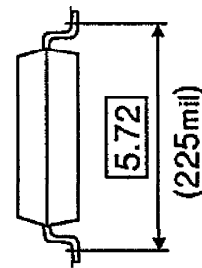
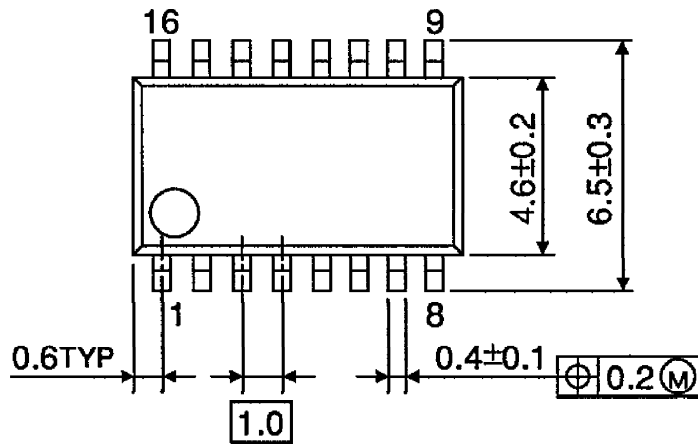


PRECAUTIONS for USING

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

OUTLINE DRAWING
SSOP16-P-225-1.00A

Unit : mm



Weight : 0.14g (Typ.)