

TOSHIBA BIPOLAR DIGITAL INTEGRATED CIRCUIT MULTI CHIP

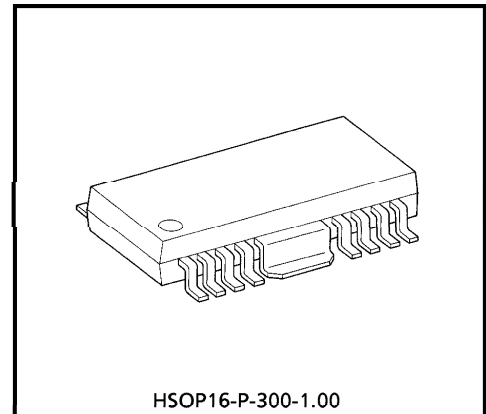
TD62M8603F

8CH LOW SATURATION VOLTAGE SOURCE DRIVER

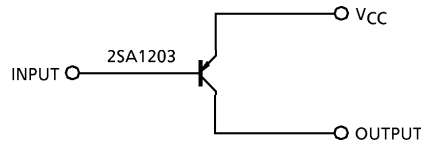
TD62M8603F is Multi Chip IC incorporates 8 low saturation discrete (2SA1203) transistors.
This IC is suitable for a battery use motor drive and LED display module applications.

FEATURES

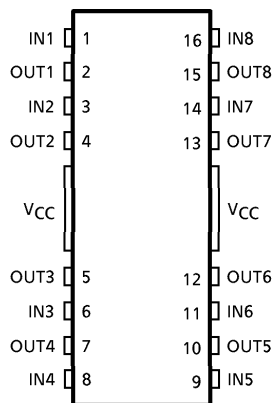
- Suitable for Motor drive circuit and LED display module
- External Bias Resistor
- Low Saturation Voltage
 $V_{CE(sat)} = 0.10V$ (Typ.) at $I_C = 0.5A$
 $V_{CE(sat)} = 0.20V$ (Max.) at $I_C = 1.5A$
- HSOP16 power small package sealed



BLOCK DIAGRAM



PIN CONNECTION (TOP VIEW)



961001EBA2

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MAXIMUM RATINGS (Ta = 25°C)

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|-----------------------|-----------------------|--------------|--------|
| Supply Voltage | V _{CC} | - 30 | V |
| Breakdown Voltage | V _{CBO} | - 30 | V |
| | V _{CEO} | - 30 | |
| | V _{EBO} | - 5 | |
| Output Current | I _O | - 1.5 | A / ch |
| | I _O (PEAK) | (Note) - 3.0 | |
| Base Current | I _B | - 0.3 | A |
| Power Dissipation | P _D | 900 | mW |
| Junction Temperature | T _j | 150 | °C |
| Operating Temperature | T _{opr} | - 40~85 | °C |
| Storage Temperature | T _{stg} | - 55~150 | °C |

(Note) T = 10ms single pulse

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

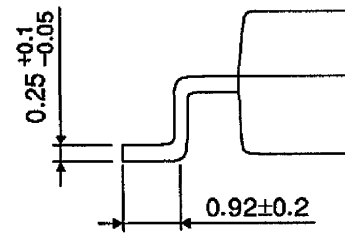
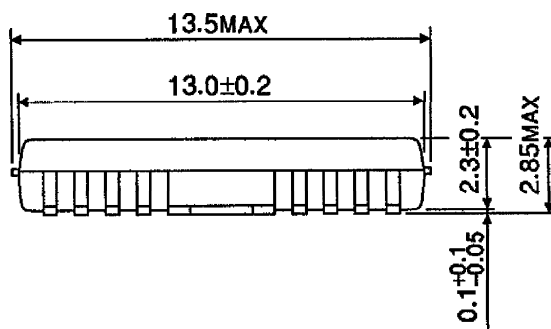
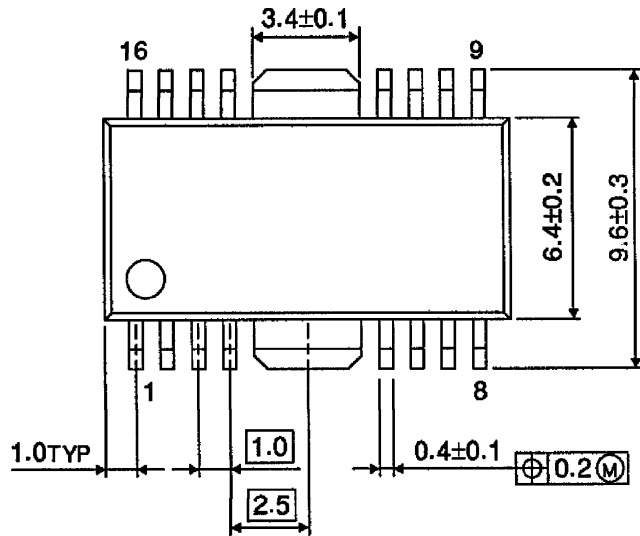
| CHARACTERISTIC | SYMBOL | TEST CIR-CUIT | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|------------------------------|-----------------------|---------------|--|------|-------|--------|------|
| Current Gain | h _{FE} (1) | — | V _{CE} = - 2V, I _C = - 0.5A | 160 | — | 320 | — |
| | h _{FE} (2) | — | V _{CE} = - 2V, I _C = - 1.5A | 50 | 100 | — | |
| Saturation Voltage | V _{CE} (sat) | — | I _C = - 0.5A, I _B = - 10mA | — | - 0.1 | - 0.50 | V |
| | | | I _C = - 1.5A, I _B = - 30mA | — | — | - 2.0 | |
| Transition Frequency | f _T | — | V _{CE} = - 2V, I _C = - 0.5A | — | 120 | — | MHz |
| Leakage Current | I _{OL} | — | V _{CC} = - 30V | — | 0 | - 5 | μA |
| Base-Emitter Forward Voltage | V _{BE} | — | V _{CE} = - 2V, I _C = - 0.5A | — | — | - 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
HSOP16-P-300-1.00

Unit : mm



Weight : 0.50g (Typ.)

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