

TA8302F

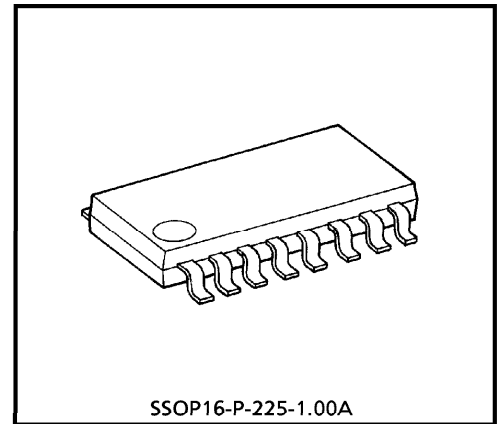
MOTOR DRIVER FOR CAMERA

TA8302F is Multi Chip IC incorporates 6 low saturation discrete transistors which equipped bias resistor and Free-Wheeling diode.

This IC is suitable for a camera use motor drive applications.

FEATURES

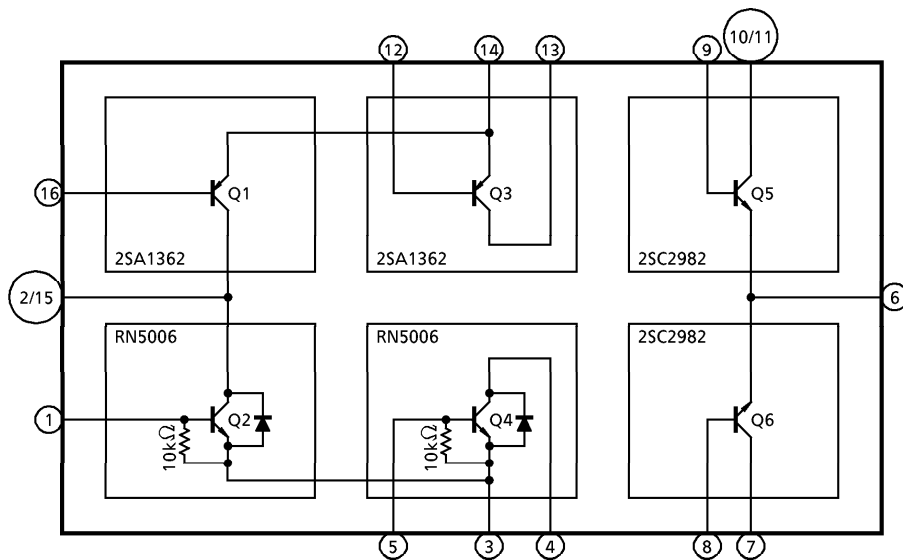
- Suitable for high efficiency motor drive circuit.
- Built-in Bias Resistor : $R = 10k\Omega$
- Built-in Free-Wheeling Diode : Only Lower side
- Small package sealed : SSOP16
- Low saturation voltage



SSOP16-P-225-1.00A

Weight : 0.14g (Typ.)

BLOCK DIAGRAM



FUNCTION DESCRIPTION ON EACH TERMINAL

| PIN No. | FUNCTION | |
|---------|------------|-----------------|
| 1 | Tr. Q2 | Input Terminal |
| 2 | Tr. Q1, Q2 | Output Terminal |
| 3 | Tr. Q2, Q4 | GND |
| 4 | Tr. Q4 | Output Terminal |
| 5 | Tr. Q4 | Input Terminal |
| 6 | Tr. Q5, Q6 | GND |
| 7 | Tr. Q6 | Output Terminal |
| 8 | Tr. Q6 | Input Terminal |
| 9 | Tr. Q5 | Input Terminal |
| 10 | Tr. Q5 | Output Terminal |
| 11 | Tr. Q5 | Output Terminal |
| 12 | Tr. Q3 | Input Terminal |
| 13 | Tr. Q3 | Output Terminal |
| 14 | Tr. Q1, Q3 | Supply Voltage |
| 15 | Tr. Q1, Q2 | Output Terminal |
| 16 | Tr. Q1 | Input Terminal |

MAXIMUM RATINGS (Ta = 25°C)

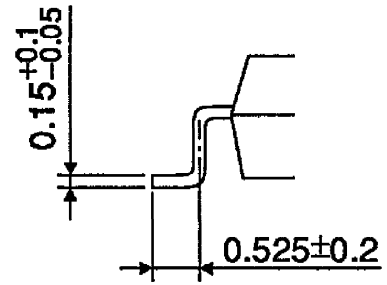
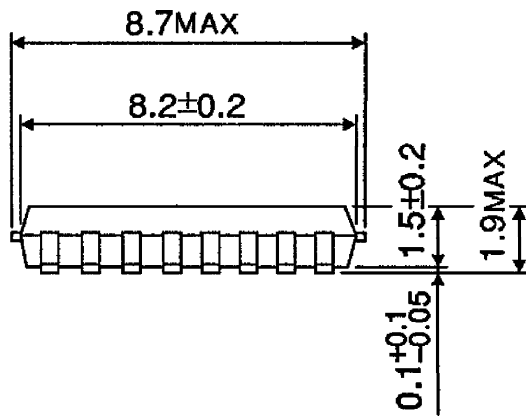
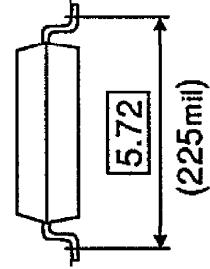
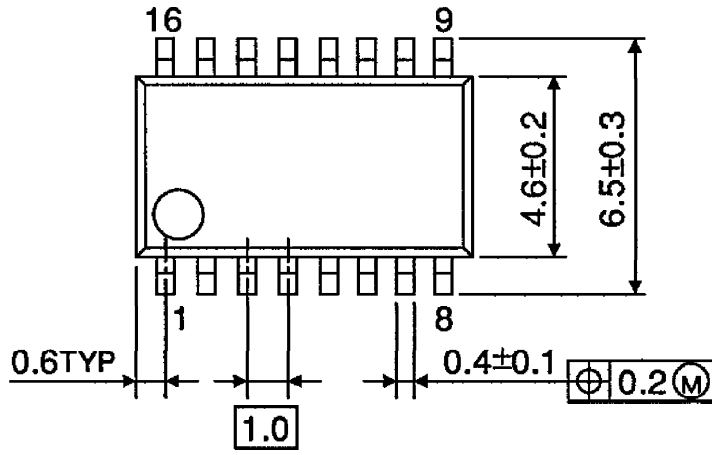
| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|-----------------------|------------------|---------|------|
| Supply Voltage | V _{CC} | 7.0 | V |
| Breakdown Voltage | V _{CB0} | 7.0 | V |
| | V _{CEO} | 7.0 | V |
| | V _{EBO} | 5.0 | V |
| | | | |
| Output Current | I _{OUT} | 0.8 | A |
| Base Current | I _B | 0.4 | A |
| Power Dissipation | P _D | 490 | mW |
| Junction Temperature | T _j | 150 | °C |
| Operating Temperature | T _{opr} | -20~60 | °C |
| Storage Temperature | T _{stg} | -55~150 | °C |

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

| CHARACTERISTIC | SYMBOL | MEASURING Tr | TEST CIR- CUIT | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|---------------------------------|-------------------|-----------------|----------------------|---|------|------|-------|------|
| Current Gain | hFE 1 | 2SA1362 | — | V _{CE} = -1V, I _C = -100mA | 120 | — | 700 | |
| | hFE 2 | 2SC2982 | — | V _{CE} = -1V, I _C = 500mA | 140 | — | 600 | |
| | hFE 3 | RN5006 | — | V _{CE} = -1V, I _C = 500mA | 160 | — | 600 | |
| Saturation Voltage | V _{CE} 1 | 2SA1362 | — | I _C = -600mA, I _B = -10mA | -0.5 | — | — | V |
| | V _{CE} 2 | 2SC2982 | — | I _C = 600mA, I _B = 20mA | — | — | 0.5 | V |
| | V _{CE} 3 | RN5006 | — | I _C = 600mA, I _B = 20mA | — | — | 0.5 | V |
| Leakage Current | I _{OFF} | | — | V _{CC} = 7V | — | — | 1.0 | μA |
| Base-Emitter Forward Voltage | V _{BE} 1 | 2SA1362 | — | V _{CE} = -1V, I _C = -600mA | -1.0 | — | -0.65 | V |
| | V _{BE} 2 | 2SC2982 | — | V _{CE} = 1V, I _C = 600mA | 0.5 | — | 0.9 | V |
| Diode Forward Voltage | V _F | RN5006 | — | I _F = 300mA | — | 0.89 | 1.2 | V |
| Transition Frequency | f _{T1} | 2SA1362 | — | V _{CE} = -5V, I _C = -10mA | — | — | 120 | MHz |
| | f _{T2} | 2SC2982 | — | V _{CE} = 1V, I _C = 500mA | — | — | 150 | MHz |
| | f _{T3} | RN5006 | — | V _{CE} = 1V, I _C = 500mA | — | — | 140 | MHz |

PACKAGE DIMENSIONS
SSOP16-P-225-1.00A

Unit : mm



Weight : 0.14g (Typ.)

RESTRICTIONS ON PRODUCT USE

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