General purpose transistor (dual transistors)

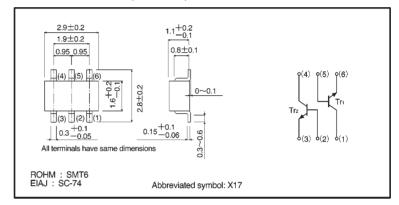
Features

- Two 2SD1484K chips in an SMT package.
- Mounting possible with SMT3 automatic mounting machine.
- Transistor elements are independent, eliminating interference.
- 4) High collector current.Ic = 500mA
- 5) Mounting cost and area can be cut in half.

StructureEpitaxial planar typeNPN silicon transistor

The following characteristics apply to both Tr₁ and Tr₂.

●External dimensions (Units: mm)



■Absolute maximum ratings (Ta = 25°C)

| Parameter | Symbol Limits | | Unit |
|---------------------------|---------------|---------------------------|------|
| Collector-base voltage | Vсво | 60 | V |
| Collector-emitter voltage | Vceo | 50 | V |
| Emitter-base voltage | VEBO | 5 | ٧ |
| Collector current | lc | 500 | mA |
| Power dissipation | Pd | 300 (TOTAL) | mW * |
| Junction temperature | Tj | 150 | င |
| Storage temperature | Tstg | − 55∼ + 150 | Ç |

*200 mW per element must not be exceeded.

Transistors IMX17

●Electrical characteristics (Ta = 25°C)

| Parameter | Symbol | Min. | Тур. | Max. | Unit | Conditions | |
|--------------------------------------|----------|------|------|------|------|----------------------------|---|
| Collector-base breakdown voltage | ВУсво | 60 | _ | _ | ٧ | Ic=100 μ A | |
| Collector-emitter breakdown voltage | BVceo | 50 | _ | _ | ٧ | Ic=1mA | |
| Emitter-base breakdown voltage | ВУЕВО | 5 | _ | _ | V | l∈=100 μ A | |
| Collector cutoff current | Ісво | _ | _ | 0.1 | μΑ | Vcb=30V | |
| Emitter cutoff current | ІЕВО | _ | _ | 0.1 | μΑ | V _{EB} =4V | |
| Collector-emitter saturation voltage | VCE(sat) | _ | _ | 0.6 | ٧ | Ic/Iв=500mA/50mA | |
| DC current transfer ratio | hfe | 120 | _ | 390 | _ | VcE=3V, Ic=100mA | * |
| Transition frequency | fτ | _ | 250 | _ | MHz | VcE=5V, IE=-20mA, f=100MHz | |
| Output capacitance | Cob | _ | 7 | _ | pF | VcB=10V, IE=0A, f=1MHz | |

^{*} Measured using pulse current.

Packaging specifications

| | Packaging type | Taping |
|----------|------------------------------|--------|
| | Code | T110 |
| Part No. | Basic ordering unit (pieces) | 3000 |
| IMX17 | | 0 |

Electrical characteristic curves

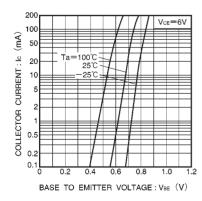


Fig.1 Grounded emitter propagation characteristics

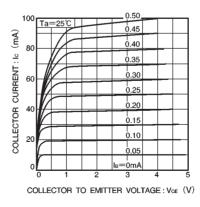


Fig.2 Grounded emitter output characteristics

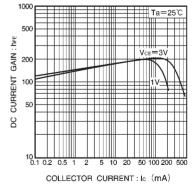


Fig.3 DC current gain vs. collector current (I)

Transistors IMX17

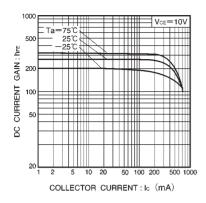


Fig.4 DC current gain vs. collector current (II)

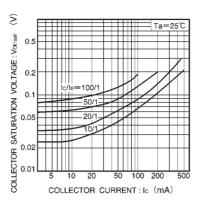


Fig.5 Collector-emitter saturation voltage vs. collector current

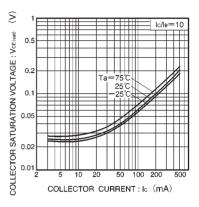


Fig.6 Collector-emitter saturation voltage vs. collector current

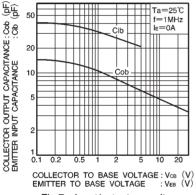


Fig.7 Input/output capacitance vs. voltage

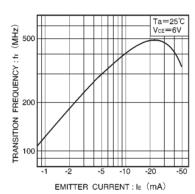


Fig.8 Gain bandwidth product vs. emitter current