

DMA56102

Silicon PNP epitaxial planar type

For digital circuits

DMA26102 in SMini5 type package

■ Features

- Low collector-emitter saturation voltage $V_{CE(sat)}$
- Halogen-free / RoHS compliant
(EU RoHS / UL-94 V-0 / MSL: Level 1 compliant)

■ Marking Symbol: F4

■ Basic Part Number

Dual DRA2124E (Common emitter)

■ Packaging

DMA561020R Embossed type (Thermo-compression sealing): 3 000 pcs / reel (standard)

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

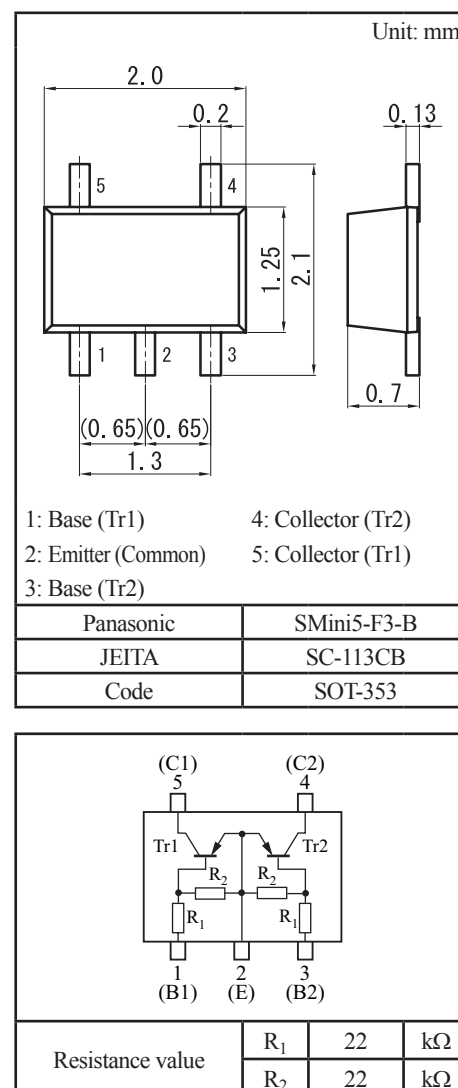
| | Parameter | Symbol | Rating | Unit |
|------------|---------------------------------------|-----------|-------------|------------------|
| Tr1 Tr2 | Collector-base voltage (Emitter open) | V_{CBO} | -50 | V |
| | Collector-emitter voltage (Base open) | V_{CEO} | -50 | V |
| | Collector current | I_C | -100 | mA |
| Overall | Total power dissipation | P_T | 150 | mW |
| | Junction temperature | T_j | 150 | $^\circ\text{C}$ |
| | Operating ambient temperature | T_{opr} | -40 to +85 | $^\circ\text{C}$ |
| | Storage temperature | T_{stg} | -55 to +150 | $^\circ\text{C}$ |

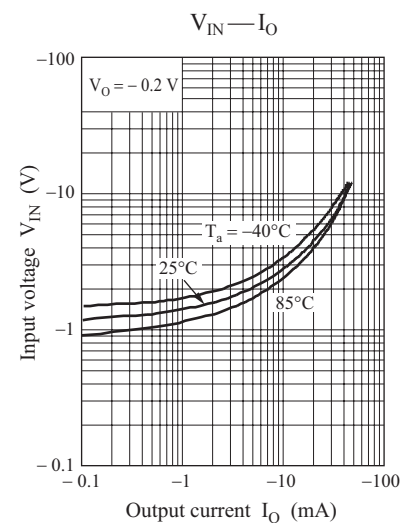
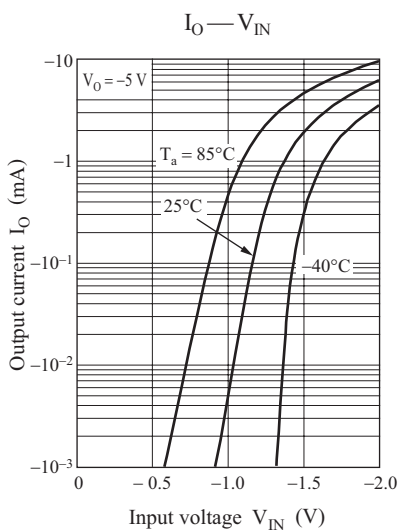
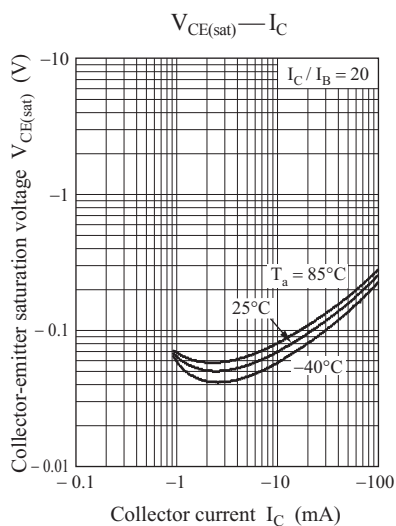
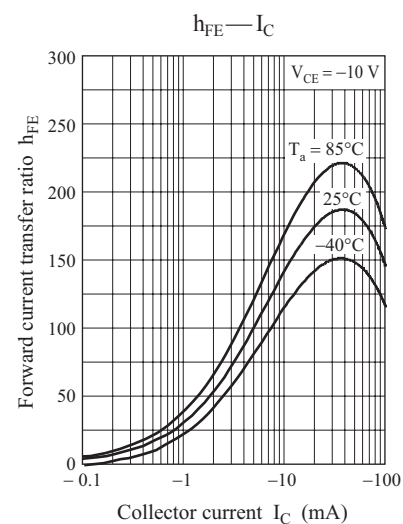
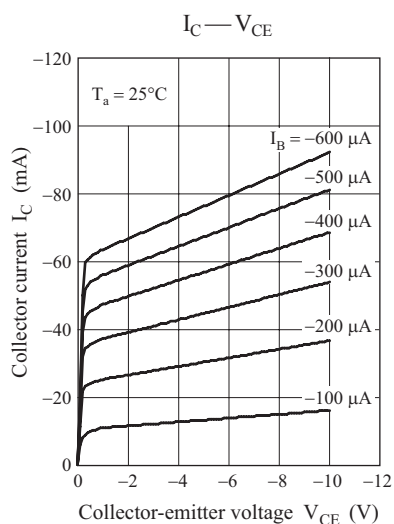
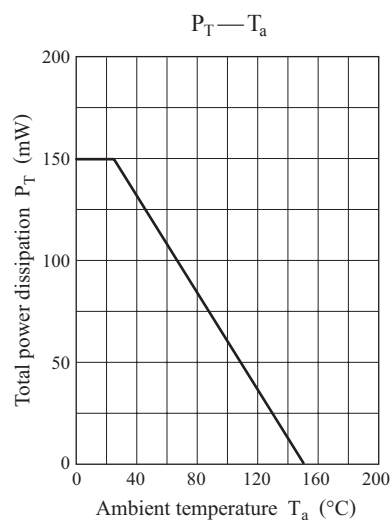
■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

| Parameter | Symbol | Conditions | Min | Typ | Max | Unit |
|--|---------------------------|--|------|------|-------|---------------|
| Collector-base voltage (Emitter open) | V_{CBO} | $I_C = -10 \mu\text{A}$, $I_E = 0$ | -50 | | | V |
| Collector-emitter voltage (Base open) | V_{CEO} | $I_C = -2 \text{ mA}$, $I_B = 0$ | -50 | | | V |
| Collector-base cutoff current (Emitter open) | I_{CBO} | $V_{CB} = -50 \text{ V}$, $I_E = 0$ | | | -0.1 | μA |
| Collector-emitter cutoff current (Base open) | I_{CEO} | $V_{CE} = -50 \text{ V}$, $I_B = 0$ | | | -0.5 | μA |
| Emitter-base cutoff current (Collector open) | I_{EBO} | $V_{EB} = -6 \text{ V}$, $I_C = 0$ | | | -0.2 | mA |
| Forward current transfer ratio | h_{FE} | $V_{CE} = -10 \text{ V}$, $I_C = -5 \text{ mA}$ | 60 | | | — |
| h_{FE} ratio *1 | h_{FE} (Small/Large) | $V_{CE} = -10 \text{ V}$, $I_C = -5 \text{ mA}$ | 0.50 | 0.99 | | — |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C = -10 \text{ mA}$, $I_B = -0.5 \text{ mA}$ | | | -0.25 | V |
| Input voltage (ON) | $V_{I(on)}$ | $V_{CE} = -0.2 \text{ V}$, $I_C = -5 \text{ mA}$ | -2.6 | | | V |
| Input voltage (OFF) | $V_{I(off)}$ | $V_{CE} = -5 \text{ V}$, $I_C = -100 \mu\text{A}$ | | | -0.8 | V |
| Input resistance | R_1 | | -30% | 22 | +30% | k Ω |
| Resistance ratio | R_1 / R_2 | | 0.8 | 1.0 | 1.2 | — |

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

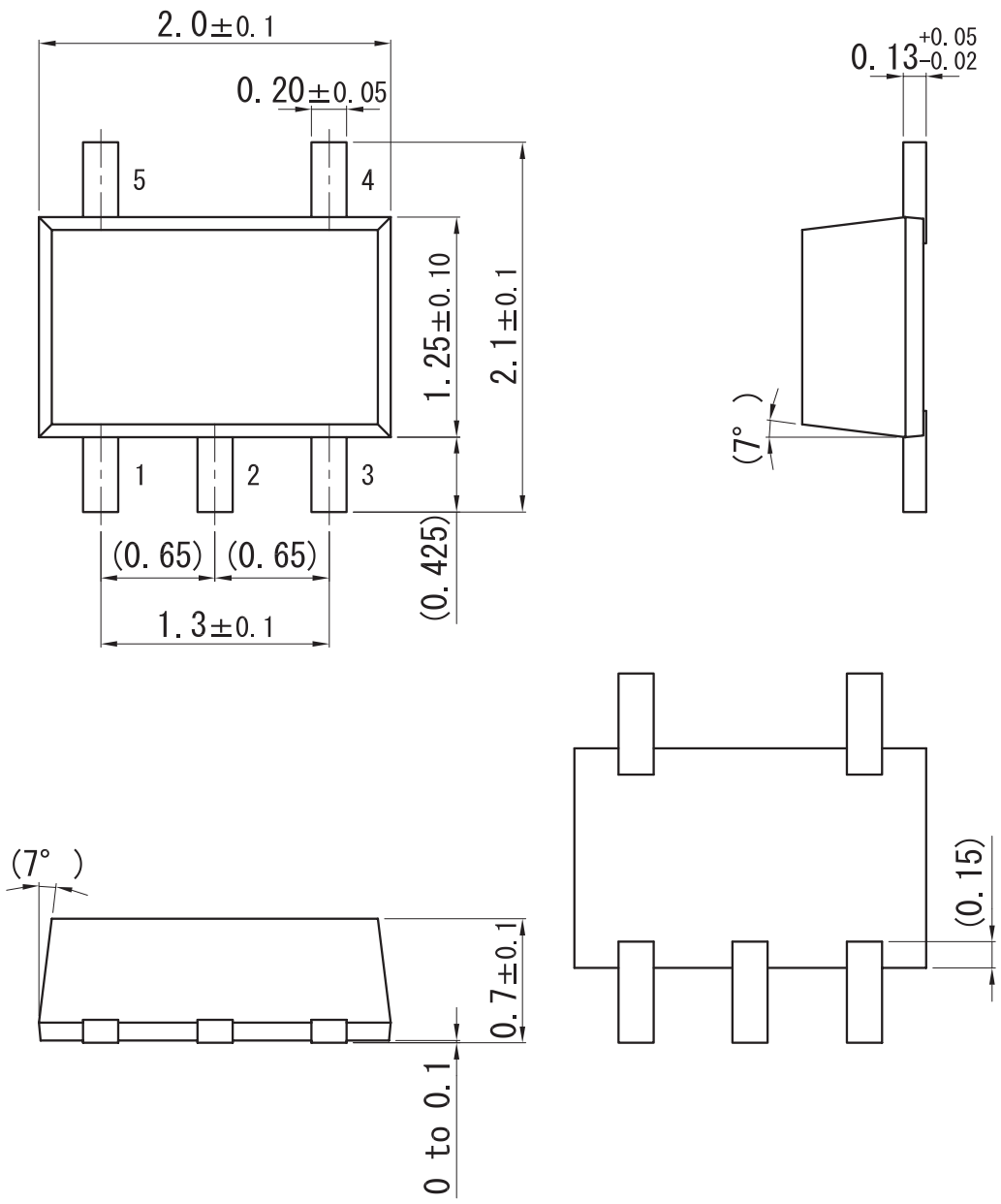
2. *1: Ratio between 2 elements



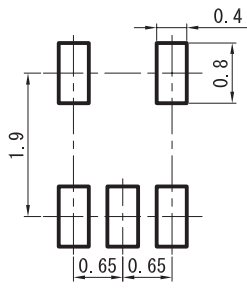


SMini5-F3-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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