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# DMA56404

## Silicon PNP epitaxial planar type

For digital circuits
DMA26404 in SMini6 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: J3

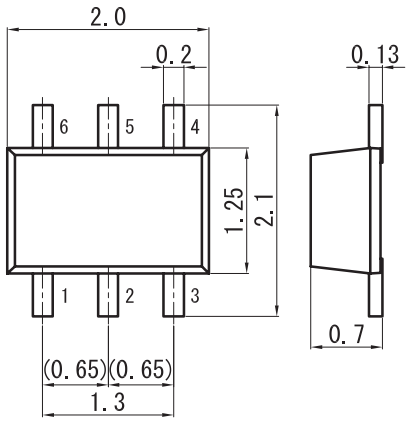
### ■ Basic Part Number

Dual DRA2114Y (Individual)

### ■ Packaging

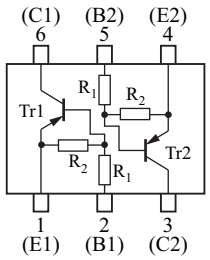
DMA564040R Embossed type (Thermo-compression sealing): 3 000 pcs / reel (standard)

Unit: mm




1: Emitter (Tr1)
2: Base (Tr1)
3: Collector (Tr2)
4: Emitter (Tr2)
5: Base (Tr2)
6: Collector (Tr1)

| | |
|---|---|
| Panasonic | SMini6-F3-B |
| JEITA | SC-113DB |
| Code | SOT-363 |




| | | | |
|---|---|---|---|
| Resistance value | $R_1$ | 10 | kΩ |
| | $R_2$ | 47 | kΩ |

### ■ Absolute Maximum Ratings $T_a = 25°C$

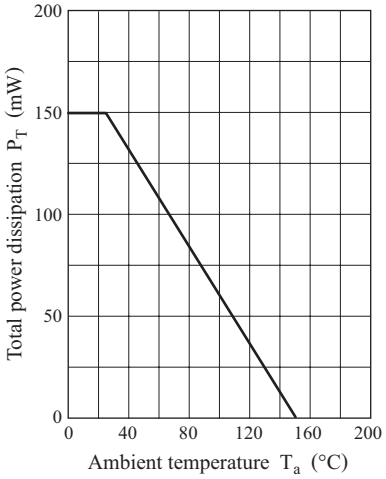
| Parameter | | Symbol | Rating | Unit |
|---|---|---|---|---|
| Tr1 Tr2 | Collector-base voltage (Emitter open) | $V_{CBO}$ | –50 | V |
| | Collector-emitter voltage (Base open) | $V_{CEO}$ | –50 | V |
| | Collector current | $I_C$ | –100 | mA |
| Overall | Total power dissipation | $P_T$ | 150 | mW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

### ■ Electrical Characteristics $T_a = 25°C \pm 3°C$

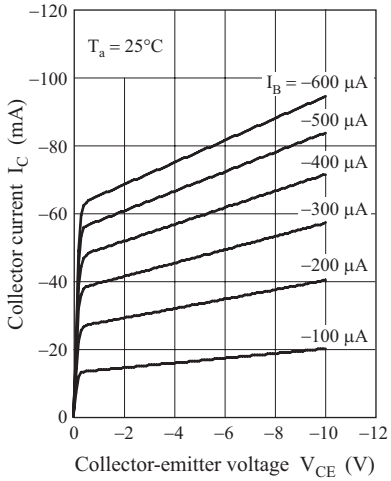
| Parameter | Symbol | Conditions | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|
| Collector-base voltage (Emitter open) | $V_{CBO}$ | $I_C = –10$ μA, $I_E = 0$ | –50 | | | V |
| Collector-emitter voltage (Base open) | $V_{CEO}$ | $I_C = –2$ mA, $I_B = 0$ | –50 | | | V |
| Collector-base cutoff current (Emitter open) | $I_{CBO}$ | $V_{CB} = –50$ V, $I_E = 0$ | | | – 0.1 | μA |
| Collector-emitter cutoff current (Base open) | $I_{CEO}$ | $V_{CE} = –50$ V, $I_B = 0$ | | | – 0.5 | μA |
| Emitter-base cutoff current (Collector open) | $I_{EBO}$ | $V_{EB} = –6$ V, $I_C = 0$ | | | – 0.2 | mA |
| Forward current transfer ratio | $h_{FE}$ | $V_{CE} = –10$ V, $I_C = –5$ mA | 80 | | | — |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C = –10$ mA, $I_B = – 0.5$ mA | | | – 0.25 | V |
| Input voltage (ON) | $V_{I(on)}$ | $V_{CE} = – 0.2$ V, $I_C = –5$ mA | –1.7 | | | V |
| Input voltage (OFF) | $V_{I(off)}$ | $V_{CE} = –5$ V, $I_C = –100$ μA | | | – 0.5 | V |
| Input resistance | $R_1$ | | –30% | 10 | +30% | kΩ |
| Resistance ratio | $R_1 / R_2$ | | 0.17 | 0.21 | 0.25 | — |

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

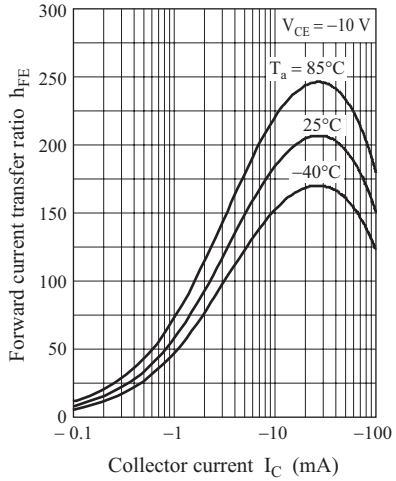
$P_T$ — $T_a$



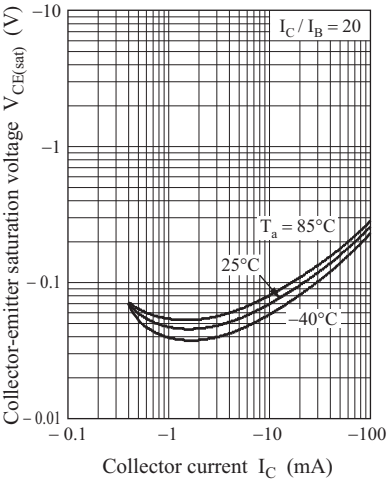

$I_C$ — $V_{CE}$



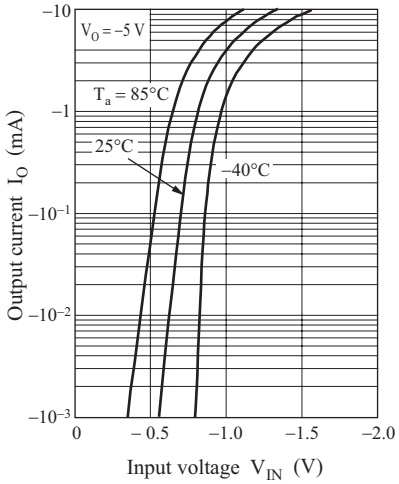

$h_{FE}$ — $I_C$



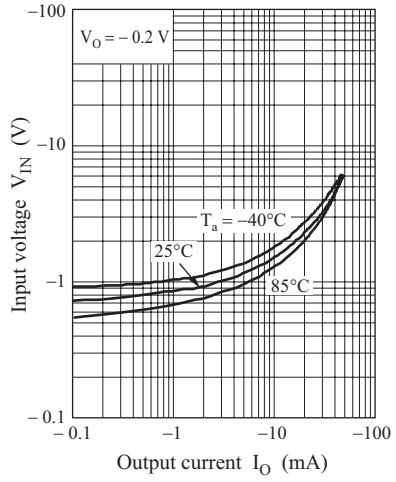

$V_{CE(sat)}$ — $I_C$




$I_O$ — $V_{IN}$

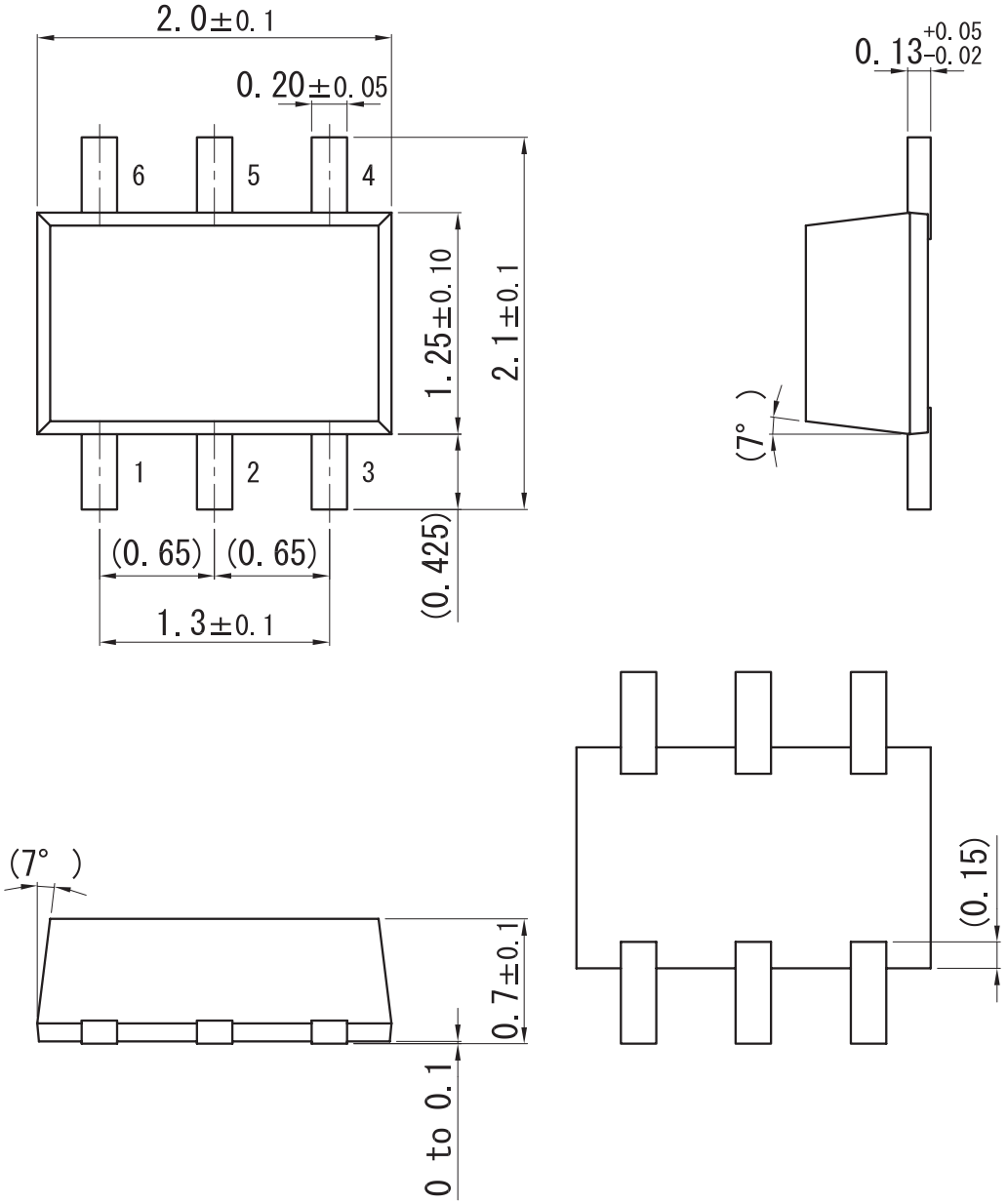



$V_{IN}$ — $I_O$

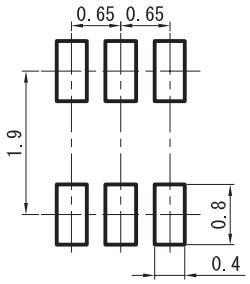


## SMini6-F3-B

Unit: mm




■ Land Pattern (Reference) (Unit: mm)



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