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DSAFG01

Silicon PNP epitaxial planar type

For High-frequency Amplifier

Marking Symbol A4

Package Code : ML3-N4-B

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

| Parameter | Symbol | Rating | Unit |
|---------------------------------------|--------|-------------|------------------|
| Collector-base voltage (Emitter open) | VCBO | -30 | V |
| Collector-emitter voltage (Base open) | VCEO | -20 | V |
| Emitter-base voltage (Collector open) | VEBO | -5 | V |
| Collector current | IC | -30 | mA |
| Collector power dissipation | Pc | 100 | mW |
| Junction temperature | Tj | 150 | $^\circ\text{C}$ |
| Storage temperature | Tstg | -55 to +150 | $^\circ\text{C}$ |

| | | |
|----------|----|-----------|
| Pin name | 1. | Base |
| | 2. | Emitter |
| | 3. | Collector |

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

| Parameter | Symbol | Conditions | Min | Typ | Max | Unit |
|--|----------|---|-----|------|------|---------------|
| Collector-base cutoff current (Emitter open) | ICBO | VCB = -10 V, IE = 0 | | | -0.1 | μA |
| Collector-emitter cutoff current (Base open) | ICEO | VCE = -20 V, IB = 0 | | | -100 | μA |
| Emitter-base cutoff current (Collector open) | IEBO | VEB = -5 V, IC = 0 | | | -10 | μA |
| Forward current transfer ratio ^{*1} | hFE | VCE = -10 V, IC = -1 mA | 70 | | 220 | - |
| Collector-emitter saturation voltage | VCE(sat) | IC = -10 mA, IB = -1 mA | | -0.1 | | V |
| Base-emitter voltage | VBE | VCE = -10 V, IC = -1 mA | | -0.7 | | V |
| Transition frequency | fT | VCE = -10 V, IC = -1 mA | 150 | 300 | | MHz |
| Small-signal revers transfer capacitance | Cre | VCE = -10 V, IC = -1mA, f = 10.7 MHz | | 1.0 | | pF |
| Noise figuer | NF | VCE = -10 V, IC = -1 mA, f = 5 MHz | | 2.8 | | dB |
| Feedback impedance | Zrb | VCE = -10 V, IC = -1 mA, f = 2 MHz | | 22 | | Ω |

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

Packing

Embossed type (Thermo-compression sealing) : 10 000 pcs / reel

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| 2010.2.24 | 2010.7.27 | |
| Prepared | Revised | |

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