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| | <h1>Tentative</h1> | DRAF143T | |
| | | Total pages | page |
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DRAF143T

Silicon PNP epitaxial planar type

For digital circuits

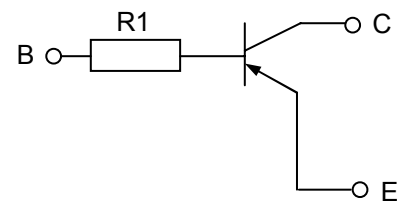
Marking Symbol : LA

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 | -50 | V |
| Collector-emitter voltage (Base open) | VCEO | -50 | V |
| Collector current | IC | -100 | mA |
| Total power dissipation | PT | 100 | mW |
| Junction temperature | Tj | 150 | $^\circ\text{C}$ |
| Storage temperature | Tstg | -55 to +150 | $^\circ\text{C}$ |

Internal Connection



| Resistance value | R1 | 4.7 | k Ω |
|------------------|----|-----------|------------|
| 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 voltage (Emitter open) | VCBO | IC = -10 μA , IE = 0 | -50 | | | V |
| Collector-emitter voltage (Base open) | VCEO | IC = -2 mA, IB = 0 | -50 | | | V |
| Collector-base cutoff current (Emitter open) | ICBO | VCB = -50 V, IE = 0 | | | -0.1 | μA |
| Collector-emitter cutoff current (Base open) | ICEO | VCE = -50 V, IB = 0 | | | -0.5 | μA |
| Emitter-base cutoff current (Collector open) | IEBO | VEB = -6 V, IC = 0 | | | -0.01 | mA |
| Forward current transfer ratio | hFE | VCE = -10 V, IC = -5 mA | 160 | | 460 | - |
| Collector-emitter saturation voltage | VCE(sat) | IC = -10 mA, IB = -0.5 mA | | | -0.25 | V |
| Input voltage | Vi(on) | VCE = -0.2 V, IC = -5 mA | -1.0 | | | V |
| | Vi(off) | VCE = -5 V, IC = -100 μA | | | -0.4 | |
| Input resistance | R1 | | -30% | 4.7 | +30% | k Ω |

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

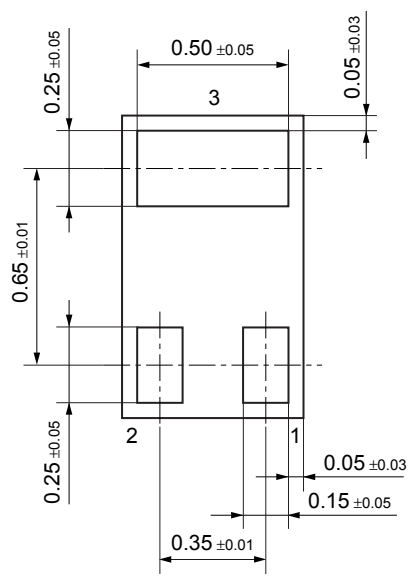
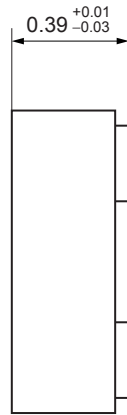
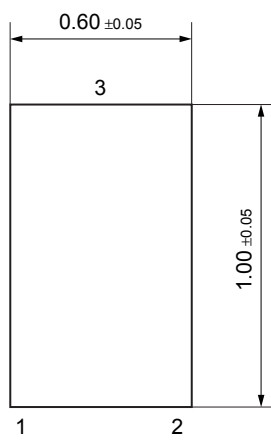
Packing

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

| | | |
|-----------|-----------|--|
| 2010.2.25 | 2010.7.12 | |
| Prepared | Revised | |

ML3-N4-B

Unit: mm



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