

● Packaging specifications

| | | | | | |
|-----------|------------------------------|--------|--------|--------|--------|
| Part No. | Package | VMT3 | EMT3 | UMT3 | SMT3 |
| | Package type | Taping | Taping | Taping | Taping |
| | Code | T2L | TL | T106 | T146 |
| | Basic ordering unit (pieces) | 8000 | 3000 | 3000 | 3000 |
| DTA114TM | | ○ | - | - | - |
| DTA114TE | | - | ○ | - | - |
| DTA114TUA | | - | - | ○ | - |
| DTA114TKA | | - | - | - | ○ |

● Absolute maximum ratings (Ta=25°C)

| Parameter | Symbol | Limits | | | | Unit |
|-----------------------------|------------------|-------------|----------|-----------|-----------|------|
| | | DTA114TM | DTA114TE | DTA114TUA | DTA114TKA | |
| Collector-base voltage | V _{CB0} | -50 | | | | V |
| Collector-emitter voltage | V _{CE0} | -50 | | | | V |
| Emitter-base voltage | V _{EB0} | -5 | | | | V |
| Collector current | I _C | -100 | | | | mA |
| Collector power dissipation | P _C | 150 | | 200 | | mW |
| Junction temperature | T _j | 150 | | | | °C |
| Storage temperature | T _{stg} | -55 to +150 | | | | °C |

● Electrical characteristics (Ta=25°C)

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Conditions |
|--------------------------------------|----------------------|------|------|------|------|--|
| Collector-base breakdown voltage | BV _{CB0} | -50 | - | - | V | I _C =-50μA |
| Collector-emitter breakdown voltage | BV _{CE0} | -50 | - | - | V | I _C =-1mA |
| Emitter-base breakdown voltage | BV _{EB0} | -5 | - | - | V | I _E =-50μA |
| Collector cutoff current | I _{CB0} | - | - | -0.5 | μA | V _{CB} =-50V |
| Emitter cutoff current | I _{EB0} | - | - | -0.5 | μA | V _{EB} =-4V |
| Collector-emitter saturation voltage | V _{CE(sat)} | - | - | -0.3 | V | I _C /I _B =-10mA/-1mA |
| DC current transfer ratio | h _{FE} | 100 | 250 | 600 | - | V _{CE} =-5V, I _C =-1mA |
| Input resistance | R _i | 7 | 10 | 13 | kΩ | - |
| Transition frequency | f _T * | - | 250 | - | MHz | V _{CE} =-10V, I _E =5mA, f=100MHz |

* Characteristics of built-in transistor

● Electrical characteristic curves

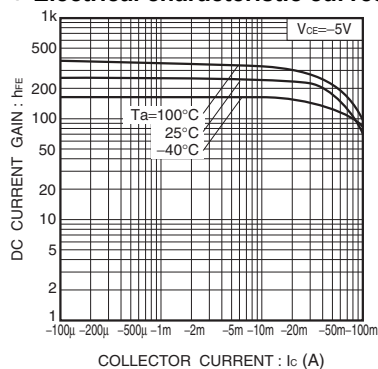


Fig.1 DC current gain vs. collector current

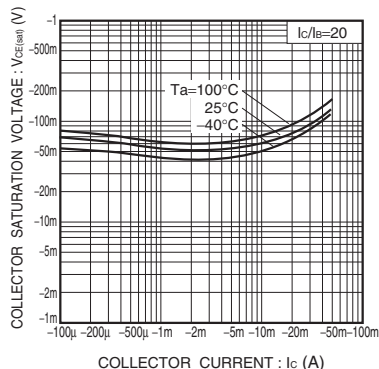


Fig.2 Collector-emitter saturation voltage vs. collector current

Notes

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