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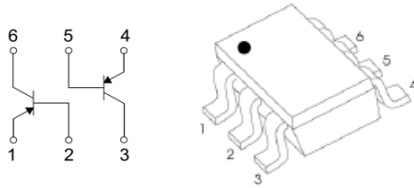


GDT



PLED

Product data sheet


SOT-363
MARKING:K3N
MAXIMUM RATINGS(T_a=25°C unless otherwise noted)

| Symbol | Parameter | Value | Units |
|------------------|---|---------|-------|
| V _{CB0} | Collector-Base Voltage | -40 | V |
| V _{CE0} | Collector-Emitter Voltage | -40 | V |
| V _{EBO} | Emitter-Base Voltage | -5 | V |
| I _C | Collector Current -Continuous | -0.2 | A |
| P _C | Collector Power Dissipation | 0.2 | W |
| R _{θJA} | Thermal Resistance. Junction to Ambient Air | 625 | °C/W |
| T _J | Junction Temperature | 150 | °C |
| T _{stg} | Storage Temperature | -55-150 | °C |

MMDT3906

DUAL TRANSISTOR (PNP+PNP)

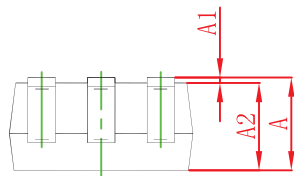
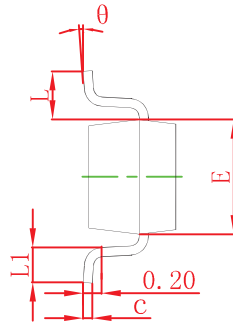
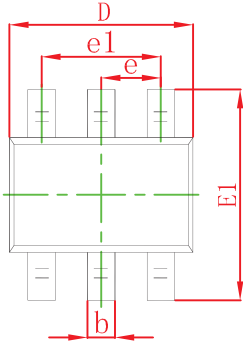
FEATURES

- Epitaxial planar die construction
- Ideal for low power amplification and switching

ELECTRICAL CHARACTERISTICS(T_a=25°C unless otherwise specified)

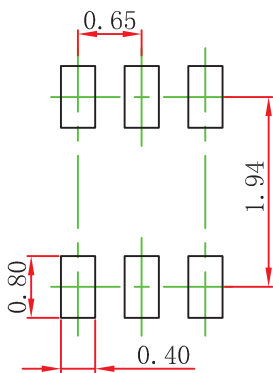
| Parameter | Symbol | Test conditions | Min | Typ | Max | Unit |
|--------------------------------------|-----------------------|---|-------|-----|-------|------|
| Collector-base breakdown voltage | V _{(BR)CBO} | I _C =-10μA, I _E =0 | -40 | | | V |
| Collector-emitter breakdown voltage | V _{(BR)CEO} | I _C =-1mA, I _B =0 | -40 | | | V |
| Emitter-base breakdown voltage | V _{(BR)EBO} | I _E =-10μA, I _C =0 | -5 | | | V |
| Collector cut-off current | I _{CEX} | V _{CE} =-30V, V _{EB(OFF)} =-3V | | | -50 | nA |
| Base cut-off current | I _{EBO} | V _{EB} =-5V, I _C =0 | | | -50 | nA |
| DC current gain | h _{FE(1)} | V _{CE} =-1V, I _C =-0.1mA | 60 | | | |
| | h _{FE(2)} | V _{CE} =-1V, I _C =-1mA | 80 | | | |
| | h _{FE(3)} | V _{CE} =-1V, I _C =-10mA | 100 | | 300 | |
| | h _{FE(4)} | V _{CE} =-1V, I _C =-50mA | 60 | | | |
| | h _{FE(5)} | V _{CE} =-1V, I _C =-100mA | 30 | | | |
| Collector-emitter saturation voltage | V _{CE(sat)1} | I _C =-10mA, I _B =-1mA | | | -0.25 | V |
| | V _{CE(sat)2} | I _C =-50mA, I _B =-5mA | | | -0.4 | V |
| Base-emitter saturation voltage | V _{BE(sat)1} | I _C =-10mA, I _B =-1mA | -0.65 | | -0.85 | V |
| | V _{BE(sat)2} | I _C =-50mA, I _B =-5mA | | | -0.95 | V |
| Transition frequency | f _T | V _{CE} =-20V, I _C =-10mA, f=100MHz | 250 | | | MHz |
| Collector output capacitance | C _{ob} | V _{CB} =-5V, I _E =0, f=1MHz | | | 4.5 | pF |
| Noise figure | NF | V _{CE} =-5V, I _C =-0.1mA, f=1KHz, R _g =1KΩ | | | 4 | dB |
| Delay time | t _d | V _{CC} =-3V, V _{BE} =0.5V | | | 35 | nS |
| Rise time | t _r | I _C =-10mA, I _{B1} =-I _{B2} =-1mA | | | 35 | nS |
| Storage time | t _s | V _{CC} =-3V, I _C =-10mA | | | 225 | nS |
| Fall time | t _f | I _{B1} =-I _{B2} =-1mA | | | 75 | nS |

SOT-363 Package Outline Dimensions



| Symbol | Dimensions In Millimeters | | Dimensions In Inches | |
|--------|---------------------------|-------|----------------------|-------|
| | Min | Max | Min | Max |
| A | 0.900 | 1.100 | 0.035 | 0.043 |
| A1 | 0.000 | 0.100 | 0.000 | 0.004 |
| A2 | 0.900 | 1.000 | 0.035 | 0.039 |
| b | 0.150 | 0.350 | 0.006 | 0.014 |
| c | 0.100 | 0.150 | 0.004 | 0.006 |
| D | 2.000 | 2.200 | 0.079 | 0.087 |
| E | 1.150 | 1.350 | 0.045 | 0.053 |
| E1 | 2.150 | 2.400 | 0.085 | 0.094 |
| e | 0.650 TYP | | 0.026 TYP | |
| e1 | 1.200 | 1.400 | 0.047 | 0.055 |
| L | 0.525 REF | | 0.021 REF | |
| L1 | 0.260 | 0.460 | 0.010 | 0.018 |
| theta | 0° | 8° | 0° | 8° |

SOT-363 Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.05mm.
3. The pad layout is for reference purposes only.

REEL SPECIFICATION

| P/N | PKG | QTY |
|----------|---------|------|
| MMDT3906 | SOT-363 | 3000 |

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