

BT136

Marking TO-220AB

BT136 XYY

Part No.: BT136

Year Code: X(2019---A,2020---B...2030---L)

Month Code: YY(01~12)



PIN CONFIGURATION: 1.MAIN TERMINAL 1 2.MAIN TERMINAL 2 3.GATE

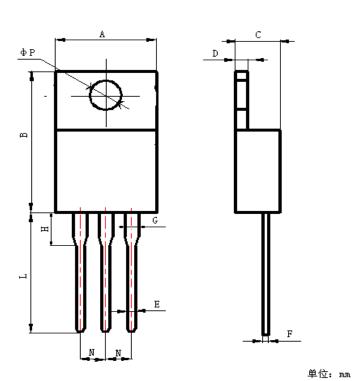
Absolute maximum ratings

| Parameter | Symbol | Value | Unit | Test condition |
|--|---------------------------|-------------|------|--|
| peak repetitive off-stage voltage | V_{DRM}, V_{RRM} | 600 | V | |
| on-state RMS current | I _T (RMS) | 4 | А | TL <u><</u> 66ºC |
| NON repetitive surge peak on-state current | I _{TSM} | 25 | А | Tp=20ms, Tj=25 °C |
| critical rate of rise on-state current | dl/dt (Q ₁₋₃) | 50 | A/μs | I _{TM} =20A, T _G =0.2A |
| peak gate current | I _{GM} | 2 | А | |
| average gate power dissipation | P _G (AV) | 0.5 | W | |
| storage temperature range | Tstg | -40 to +150 | °C | |
| operating junction temperature range | Tj | 125 | °C | |

Electrical characteristics (Ti=25°C) unless otherwise specified

| Parameter | Symbol | Value | Unit | Test condition |
|---|------------------|-----------------|------|---|
| gate trigger current | I _{GT} | <u>≤</u> 10 | mA | $T2+G+ V_D=12V, I_T=0.1A$ |
| | | <u>≤</u> 10 | mA | T2+G- $V_D=12V$, $I_T=0.1A$ |
| | | <u>≤</u> 10 | mA | T2-G- V _D =12V, I _T =0.1A |
| | | <u><</u> 25 | mA | T2-G+ $V_D=12V$, $I_T=0.1A$ |
| gate trigger voltage | V _{GT} | <u><</u> 1.5 | V | V _D =12V, I _T =0.1A |
| hold current | I _H | ≤30 | mA | V _D =12V, I _T =0.1A |
| critical rate of rise off-state voltage | dv/dt | ≥50 | V/μs | V _D =67%V _{DRM} |
| on-state voltage | V _{TM} | <u>≤</u> 1.7 | V | I _T =5A |
| off-state leakage current | I _{DRM} | ≤0.5 | mA | V _D =V _{DRM} ; Tj=125°C |
| thermal resistance | Rth(j-a) | 60 | °C/W | |
| | Rth(j-c) | ≤3.7 | | |
| | Ktri(J-C) | <u>≤</u> 3.1 | | |

PACKAGE TO-220 AB



| Unit (mm) | MIN | MAX |
|-----------|-------|-------|
| A | 10.15 | 10.2 |
| В | 14.9 | 15.5 |
| С | 4.5 | 4.7 |
| D | 1.27 | 1.35 |
| E | 0.65 | 0.85 |
| F | 0.4 | 0.5 |
| G | 1.26 | 1.29 |
| Н | 3.32 | 3.78 |
| L | 13.67 | 14.67 |
| N | 2.24 | 2.54 |
| φР | 3.84 | 3.87 |

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