

STA524A

查询STA524A供应商

N-channel

捷多邦, 专业PCB打样工厂, 24小时加急出货

General purpose

External Dimensions  STA (10-pin)

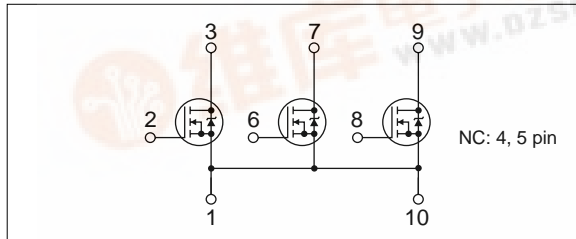
Absolute maximum ratings

(Ta=25°C)

| Symbol | Ratings | Unit |
|------------------------|--|------|
| V _{DSS} | 200 | V |
| V _{GSS} | ±20 | V |
| I _D | ±7 | A |
| I _D (pulse) | ±15 (PW≤100μs, duty≤1%) | A |
| E _{AS} * | 55 | mJ |
| I _{AS} | 7 | A |
| P _T | 3.5 (Ta=25°C with all circuits operating, without heatsink) | W |
| | 15 (Ta=25°C with all circuits operating, with infinite heatsink) | W |
| T _{ch} | 150 | °C |
| T _{stg} | -40 to +150 | °C |

*: V_{DD}=25V, L=2mH, I_L=7A, unclamped, R_G=50Ω, see Fig. E on page 15.

Equivalent circuit diagram



Electrical characteristics

(Ta=25°C)

| Symbol | Specification | | | Unit | Conditions |
|----------------------|---------------|-----|------|------|--|
| | min | typ | max | | |
| V _{(BR)DSS} | 200 | | | V | I _D =100μA, V _{GS} =0V |
| I _{GSS} | | | ±100 | nA | V _{GS} =±20V |
| I _{DSS} | | | 100 | μA | V _{DS} =200V, V _{GS} =0V |
| V _{TH} | 1.0 | | 2.0 | V | V _{DS} =10V, I _D =250μA |
| R _{e(yfs)} | 4.0 | 7.0 | | S | V _{DS} =10V, I _D =3.5A |
| R _{DS(ON)} | | 280 | 350 | mΩ | I _D =3.5A, V _{GS} =10V |
| | | 320 | 480 | mΩ | I _D =3.5A, V _{GS} =4V |
| C _{iss} | | 420 | | pF | V _{DS} =10V |
| C _{oss} | | 210 | | pF | V _{GS} =0V |
| C _{rss} | | 90 | | pF | f=1.0MHz |
| t _{d(on)} | | 16 | | ns | I _D =3.5A, V _{DD} ≠100V, |
| t _r | | 60 | | ns | R _L =28.6Ω, |
| t _{d(off)} | | 100 | | ns | V _{GS} =5V, R _G =25Ω, |
| t _f | | 70 | | ns | see Fig. 3 on page 16. |
| V _{SD} | | 1.0 | 1.5 | V | V _{SD} =7A, V _{GS} =0V |

Characteristic curves