

用途：用于高功率 DC/DC 转换和功率开关。

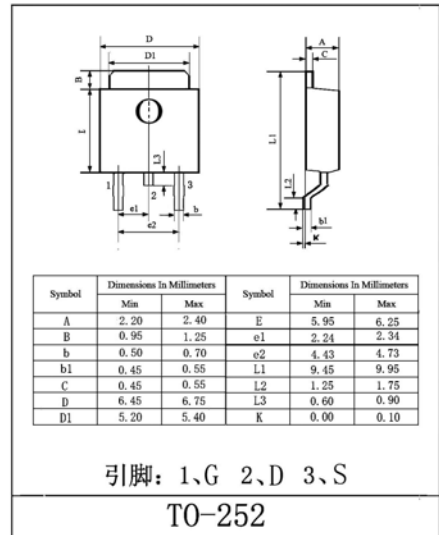
Purpose: These devices are well suited for high efficiency switching DC/DC converters and switch mode power supplies.

特点：具有低导通电阻的超高密度设计，坚固可靠，表面贴装封装，ESD 保护。

Features: Super high dense cell design for low $R_{DS(on)}$, Rugged and reliable, surface mount package, ESD protected.

极限参数/Absolute maximum ratings ($T_a=25^\circ\text{C}$)

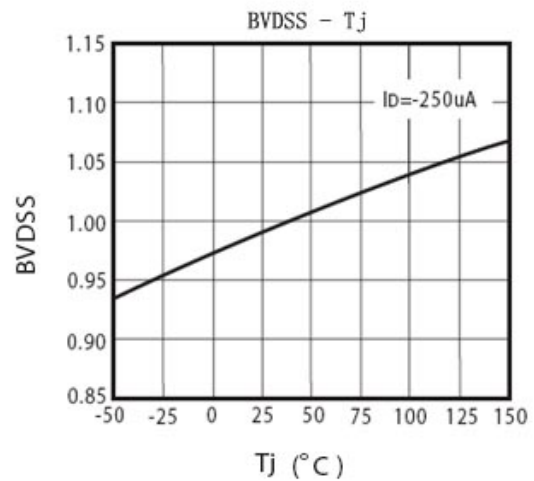
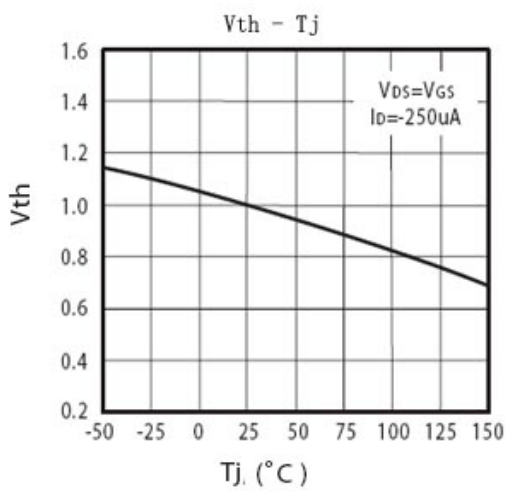
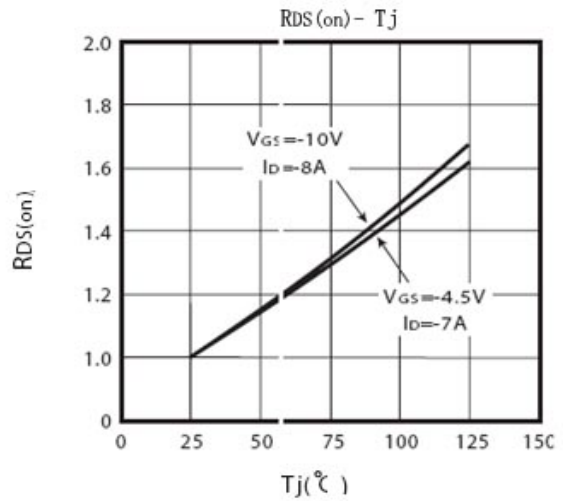
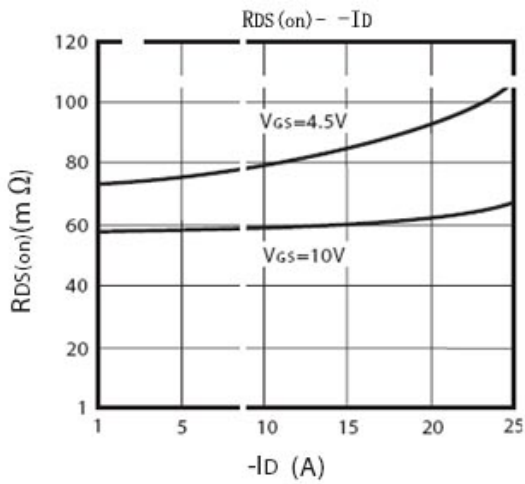
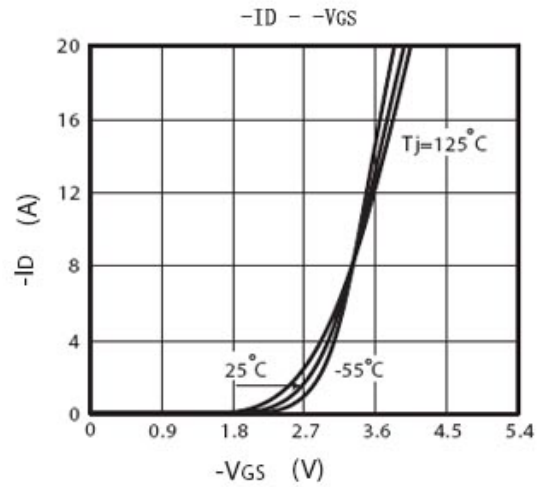
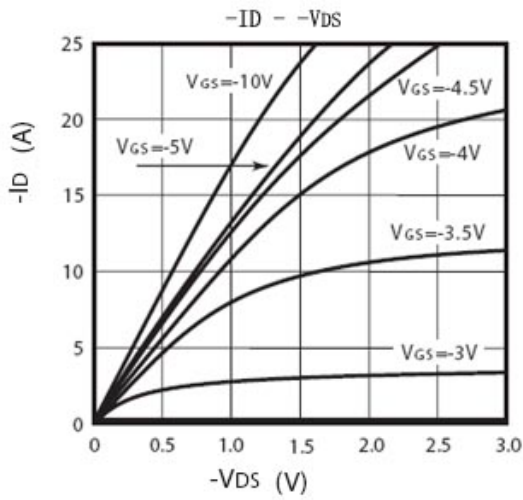
| 参数符号 Symbol | 数值 Rating | 单位 Unit |
|-----------------------------|--------------|------------------|
| V_{DS} | -60 | V |
| $I_D(T_c=25^\circ\text{C})$ | -18 | A |
| $I_D(T_c=70^\circ\text{C})$ | -14.5 | A |
| I_{DM} | -50 | A |
| V_{GS} | ± 20 | V |
| E_{AS} | 36 | mJ |
| $P_D(T_c=25^\circ\text{C})$ | 42 | W |
| $P_D(T_c=70^\circ\text{C})$ | 27 | W |
| T_J, T_{STG} | -55 to 150 | $^\circ\text{C}$ |



电性能参数/Electrical Characteristics ($T_a=25^\circ\text{C}$)

| 参数符号 Symbol | 测试条件 Test Conditions | 最小值 Min | 典型值 Typ | 最大值 Max | 单位 Unit |
|----------------|--|------------|------------|------------|------------|
| BV_{DSS} | $V_{GS}=0V$ $I_D=-250\mu A$ | -60 | | | V |
| I_{DSS} | $V_{DS}=-48V$ $V_{GS}=0V$ | | | -1.0 | μA |
| I_{GSS} | $V_{GS}=\pm 20V$ $V_{DS}=0V$ | | | ± 10 | μA |
| $V_{GS(th)}$ | $V_{DS}=V_{GS}$ $I_D=-250\mu A$ | -1.0 | -2.0 | -3.0 | V |
| $R_{DS(on)}$ | $V_{GS}=-10V$ $I_D=-8A$ | | 59 | 77 | $m\Omega$ |
| | $V_{GS}=-4.5V$ $I_D=-7A$ | | 77 | 104 | $m\Omega$ |
| g_{FS} | $V_{DS}=-10V$ $I_D=-8A$ | | 18 | | S |
| V_{SD} | $V_{GS}=0V$ $I_S=-2A$ | | -0.81 | -1.3 | V |
| C_{iss} | $V_{DS}=-25V$ $V_{GS}=0V$ $f=1.0MHz$ | | 1040 | | pF |
| C_{oss} | | | 80 | | pF |
| C_{rSS} | | | 60 | | pF |
| $t_{d(on)}$ | $V_{DD}=-30V$ $I_D=-1.0A$ $V_{GS}=-10V$ $R_{GEN}=6\Omega$ | | 24 | | ns |
| t_r | | | 17.5 | | ns |
| $t_{d(off)}$ | | | 105 | | ns |
| t_f | | | 21 | | ns |

BRD18P06 (CS18P06D)



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