

# 2SK765, 2SK765A

[查询"2SK765"供应商](#)

## ■ Features

- Low ON resistance  $R_{DS(on)} : R_{DS(on)} = 0.5\Omega$  (typ.)
- High switching rate :  $t_f = 90\text{ns}$  (typ.)
- No secondary breakdown
- High breakdown voltage, large power

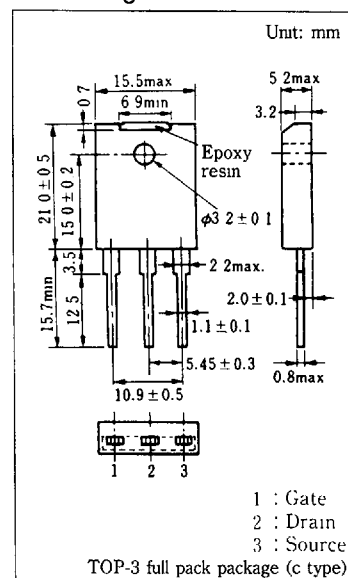
### ■ Application

- No contact relay
- Solenoid drive
- Motor drive
- Control equipment
- Switching power source

■ Absolute Maximum Ratings (Tc=25°C)

| Item                 |                          | Symbol    | Value           | Unit             |
|----------------------|--------------------------|-----------|-----------------|------------------|
| Drain-source voltage | 2SK765                   | $V_{DSS}$ | 400             | V                |
|                      | 2SK765A                  |           | 450             |                  |
| Gate-source voltage  |                          | $V_{GSS}$ | $\pm 20$        | V                |
| Drain current        | DC                       | $I_D$     | 10              | A                |
|                      | Pulse-to-peak value      | $I_{DP}$  | 20              |                  |
| Power dissipation    | $T_C = 25^\circ\text{C}$ | $P_D$     | 100             | W                |
|                      | $T_a = 25^\circ\text{C}$ |           | 3.0             |                  |
| Channel temperature  |                          | $T_{ch}$  | 150             | $^\circ\text{C}$ |
| Storage temperature  |                          | $T_{stg}$ | $-55 \sim +150$ | $^\circ\text{C}$ |

### ■ Package Dimensions



### ■ Electrical Characteristics (Tc=25°C)

| Item                         | Symbol       | Condition                                           | min. | typ. | max.    | Unit      |
|------------------------------|--------------|-----------------------------------------------------|------|------|---------|-----------|
| Drain current                | $I_{DSS}$    | $V_{DS}=320V, V_{GS}=0$                             |      |      | 0.1     | <b>mA</b> |
| Gate-source current          | $I_{GSS}$    | $V_{GS}=\pm 20V, V_{DS}=0$                          |      |      | $\pm 1$ | $\mu A$   |
| Drain-source voltage         | 2SK765       | $V_{DS}=1mA, V_{GS}=0$                              | 400  |      |         | <b>V</b>  |
|                              | 2SK765A      |                                                     | 450  |      |         |           |
| Gate threshold voltage       | $V_{th}$     | $V_{DS}=25V, I_D=1mA$                               | 1    |      | 5       | <b>V</b>  |
| Drain-source ON resistance   | $R_{DS(on)}$ | $V_{GS}=10V, I_D=5A$                                |      | 0.5  | 0.75    | $\Omega$  |
| Forward transfer admittance  | $ Y_{fs} $   | $V_{DS}=25V, I_D=5A$                                | 3.5  | 5.5  |         | <b>S</b>  |
| Input capacitance            | $C_{iss}$    | $V_{DS}=20V, V_{GS}=0, f=1MHz$                      |      | 1100 |         | <b>pF</b> |
| Output capacitance           | $C_{oss}$    |                                                     |      | 215  |         | <b>pF</b> |
| Reverse transfer capacitance | $C_{rss}$    |                                                     |      | 100  |         | <b>pF</b> |
| Turn-on time                 | $t_{on}$     | $V_{GS}=10V, I_D=5A$<br>$V_{DD}=150V, R_L=30\Omega$ |      | 70   |         | <b>ns</b> |
| Fall time                    | $t_f$        |                                                     |      | 90   |         | <b>ns</b> |
| Delay time                   | $t_d(off)$   |                                                     |      | 230  |         | <b>ns</b> |

