



N-Channel Enhancement Mode Field Effect Transistor

Product Summary

| | |
|--|--------|
| V_{DS} | 60V |
| I_D | 260mA |
| $R_{DS(ON)}$ (at $V_{GS}=10V$) | 2.5ohm |
| $R_{DS(ON)}$ (at $V_{GS}=4.5V$) | 3.0ohm |
| Gate-Source ESD Rating Up to 2KV (HBM) | |

General Description

Trench Power MV MOSFET technology
Voltage controlled small signal switch
Low input Capacitance
Fast Switching Speed
Low Input / Output Leakage
Moisture Sensitivity Level 3
Epoxy Meets UL 94 V-0 Flammability Rating
Halogen Free

Applications

Battery operated systems
Solid-state relays
Direct logic-level interface TTL/CMOS

Absolute Maximum Ratings ($T_A=25$ unless otherwise noted)



2N7002KCL3

Electrical Characteristics ($T_J=25$ unless otherwise noted)

| Parameter | Symbol | Conditions | Min | Typ | Max | Units |
|--------------------------------|------------|----------------------|-----|-----|-----|-------|
| Static Parameter | | | | | | |
| Drain-Source Breakdown Voltage | BV_{DSS} | $V_{GS}=0V, I_D=250$ | | | | |



Typical Performance Characteristics

Figure1. Output Characteristics

Figure2. Transfer Characteristics



Figure7. On-Resistance vs V_{GS}

Figure8. Threshold Voltage vs Temperature



DFN1006-3L Package information



