



## 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
<b>Static Parameter</b>						
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



