P-Channel MOSFET KF3001

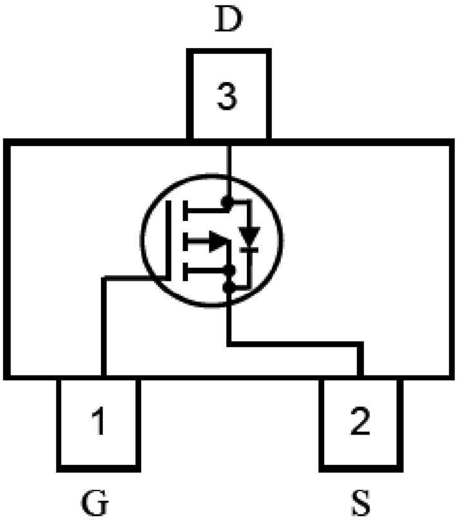
General Description

KF3001 Series P-channel enhancement mode field-effect transistor ,produced with high cell density DMOS trench technology, which is especially used to minimize on-state resistance. This device particularly suits low voltage applications, and low power dissipation,and low power dissipation in a very small outline surface mount package.

Features

- -20V/-2.8A
  $R_{DS(ON)}$ =93mΩ@ V_{GS}=-4.5V,I_D=-2.8A
  $R_{DS(ON)}$ =113mΩ@ V_{GS}=-2.5V,I_D=-2A
- High Density Cell Design For Ultra Low On -Resistance
- Subminiature surface mount package:SOT23-3L

Pin Configuration



Typical Application

- Power management
- Load switch
- Battery protection

Absolute Maximum Ratings

Parameter		Symbol	Ratings	Unit
Drain-Source Voltage		V_{DSS}	-20	V
Gate-Source Voltage		V_{GSS}	±8	V
Continuous Drain Current	T_A=25℃	I_D	-2.8	A
	T_A=70℃		-1.8	
Pulsed Drain Current[1,2]		I_{DM}	-10	A
Total Power Dissipation	T_A=25℃	Pd	0.7	W
	T_A=70℃		0.45	
Operating Temperature Range		T_{Opr}	150	℃
Storage Temperature Range		T_{stg}	-65/150	℃