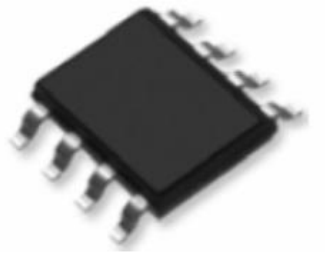
SK22P04-P8

P-Channel MOSFET

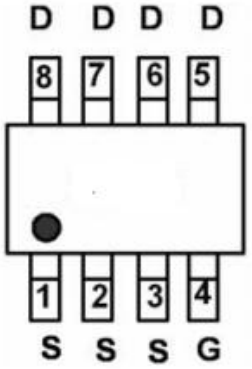
BV_{DSS},T_A=25℃	I_D,T_A=25℃	$R_{DS(on)}$,typ@-10V
-40V	-22A	12mΩ

Features

- Advanced trench cell design
- High speed switch
- BV_{DSS} ≧ - 40 V
- $R_{DS(ON)}$ ≦15 mΩ @ V_{GS} = - 10 V
- $R_{DS(ON)}$ ≦21 mΩ @ V_{GS} = - 4.5 V



SOP-8 top view



Applications

- Portable appliances
- Battery management

Absolute Maximum Ratings(T_A=25℃,unless otherwise noted.)

Parameter	Symbol	Limit	Unit
Drain-source Voltage	V_{DS}	-40	V
Gate-source Voltage	V_{GS}	±20	V
Drain Current-Continuous(note 1)	I_D	-22	A
Operating Junction Temperature Range	T_J	-55~150	℃
Storage Temperature Range	T_{STG}	-55~150	℃

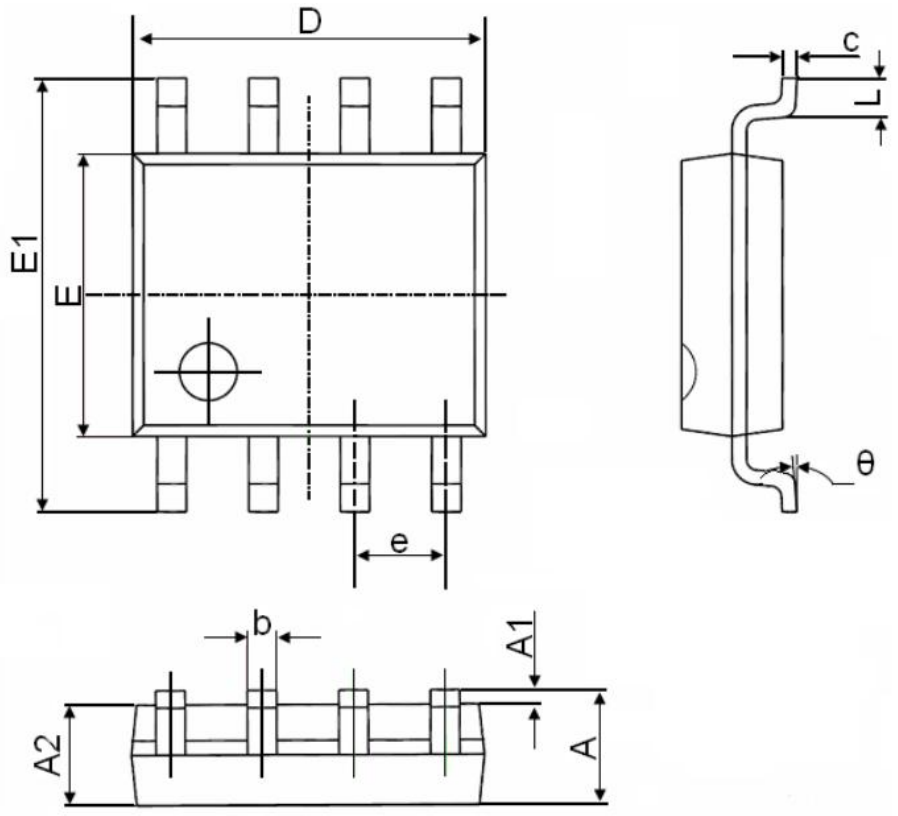
Electrical Characteristics(T_A=25℃,unless otherwise noted.)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Drain-source Breakdown voltage	BV_{DSS}	V_{GS}=0V, I_D=-250μA	-40			V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=-32V, V_{GS}=0V			-1	μA
		V_{DS}=-32V, V_{GS}=0V, T_J=85℃			-30	μA
Gate-source leakage current	I_{GSS}	V_{GS}=±20V, V_{DS}=0V			±100	nA
Gate Threshold voltage	$V_{GS(th)}$	V_{DS}=V_{GS}, I_D=-250μA	-1.0	-1.5	-2.0	V
Static Drain to Source on resistance	$R_{DS(on)}$	V_{GS}= -10V, I_D= -1A		12	15	mΩ
		V_{GS}= -4.5V, I_D= -1A		16	21	mΩ
Diode Forward Voltage	V_{SD}	V_{GS}=0V, I_S=-0.5A		-0.7	-1.3	V

Package Information

SOP-8

Dimensions in mm



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	1.350	1.750	0.053	0.069
A1	0.100	0.250	0.004	0.010
A2	1.350	1.550	0.053	0.061
b	0.330	0.510	0.013	0.020
c	0.170	0.250	0.006	0.010
D	4.700	5.100	0.185	0.200
E	3.800	4.000	0.150	0.157
E1	5.800	6.200	0.228	0.244
e	1.270(BSC)		0.050(BSC)	
L	0.400	1.270	0.016	0.050
θ	0°	8°	0°	8°