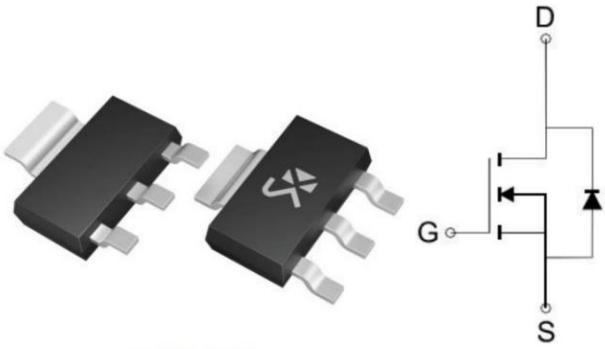
SK01N65E

N-Channel MOSFET

BV_{DSS},T_A=25℃	$R_{DS(ON)}$,Max@10V	I_D,T_A=25℃
650V	12.5Ω	1A

Features

- Green Device Available
- Super Low Gate Charge
- SOT-223 for Surface Mount Package



SOT-223

Applications

The 01N65E is the high cell density trenched N-ch MOSFETs,which provide RDSON and gate charge for most of the synchronous buck converter applications.
The 01N65E meet the RoHS and Green Product requirement,guaranteed with full function reliability approved.

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

Parameter	Symbol	Limit	Unit
Drain-source Voltage	V_{DS}	650	V
Gate-source Voltage	V_{GS}	±30	V
Drain Current-Continuous	I_D	1	A

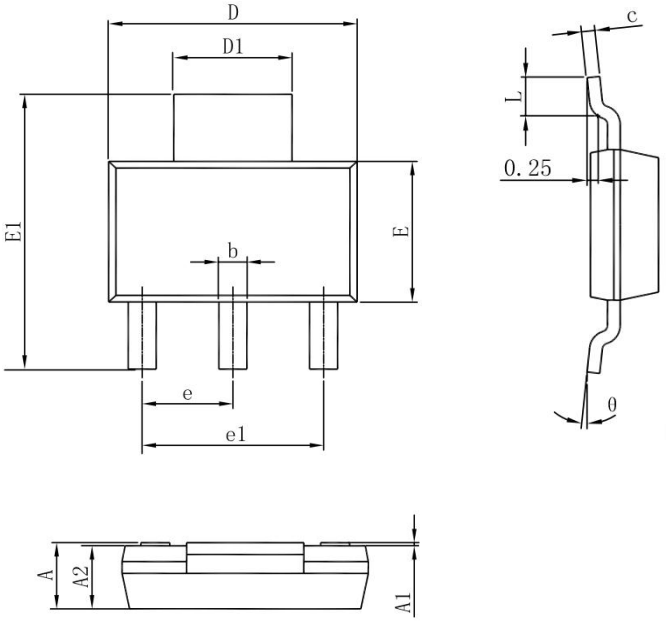
Electrical Characteristics(T_A=25℃,unless otherwise noted.)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Off Characteristics						
Drain-source breakdown voltage	BV_{DSS}	V_{GS}=0V,I_D=250μA	650			V
Drain-source leakage current	I_{DSS}	V_{DS}=650V,V_{GS}=0V			1	μA
Gate-source leakage current,forward	I_{GSSF}	V_{GS}=30V,V_{DS}=0V			100	nA
Gate-source leakage current,reverse	I_{GSSR}	V_{GS}=-30V,V_{DS}=0V			-100	nA
On Characteristics						
Gate Threshold voltage	$V_{GS(th)}$	V_{DS}=V_{GS},I_D=250μA	2.0		4.0	V
Drain-source on resistance	$R_{DS(on)}$	V_{GS}=10V,I_D=0.6A			12.5	Ω
		V_{GS}=4.5V,I_D=0.6A			93	Ω
Drain-Source Diode Characteristics						
Diode Forward Voltage	V_{SD}	V_{GS}=0V,I_D=0.8A			1.3	V

Package Information

SOT-223

Dimensions in mm



Symbol	Dimensions In Millimeters		
	MIN	NOM	MAX
A	/	/	1.80
A1	0.02	/	0.10
A2	1.50	1.60	1.70
b	0.66	0.71	0.84
c	0.23	0.30	0.35
D	6.30	6.50	6.70
D1	2.90	3.00	3.10
E	3.30	3.50	3.70
E1	6.70	7.00	7.30
e	2.30 BASIC		
e1	4.60 BASIC		
L	0.75	/	/
θ	0°	/	10°