



**SKYSEMI**  
思开半导体

**SS4406A**  
30V N-Channel MOSFET

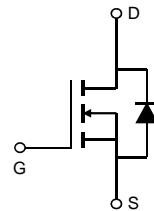
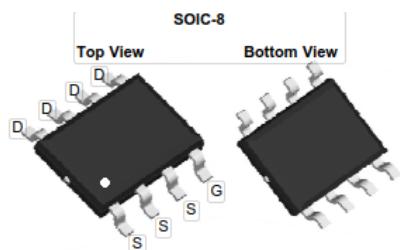
### General Description

The SS4406A uses advanced trench technology to provide excellent  $R_{DS(ON)}$  with low gate charge. This device is suitable for high side switch in SMPS and general purpose applications.

### Product Summary

$V_{DS}$	30V
$I_D$ (at $V_{GS}=10V$ )	13A
$R_{DS(ON)}$ (at $V_{GS}=10V$ )	< 11.5mΩ
$R_{DS(ON)}$ (at $V_{GS} = 4.5V$ )	< 15.5mΩ

100% UIS Tested



### Absolute Maximum Ratings $T_A=25^\circ\text{C}$ unless otherwise noted

Parameter	Symbol	Maximum	Units
Drain-Source Voltage	$V_{DS}$	30	V
Gate-Source Voltage	$V_{GS}$	$\pm 20$	V
Continuous Drain Current <sup>A</sup>	$I_D$	13	A
Current $T_A=70^\circ\text{C}$		10.4	
Pulsed Drain Current <sup>C</sup>	$I_{DM}$	100	
Avalanche Current <sup>C</sup>	$I_{AS}$	22	A
Avalanche energy $L=0.5\text{mH}$ <sup>C</sup>	$E_{AS}$	24	mJ
Power Dissipation <sup>B</sup>	$P_D$	3.1	W
$T_A=70^\circ\text{C}$		2	
Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to 150	°C

### Thermal Characteristics

Parameter	Symbol	Typ	Max	Units
Maximum Junction-to-Ambient <sup>A</sup> $t \leq 10\text{s}$	$R_{\theta JA}$	31	40	°C/W
Maximum Junction-to-Ambient <sup>A,D</sup> Steady-State		59	75	°C/W
Maximum Junction-to-Lead	$R_{\theta JL}$	16	24	°C/W