

General Description

This device has been developed using Trench technology, these products have been designed to minimize on-state resistance and fast switching performance. These products are suited for high efficiency power management applications.

Features

- Low On-Resistance
- High Current Capability
- RoHS Compliant and Halogen Free

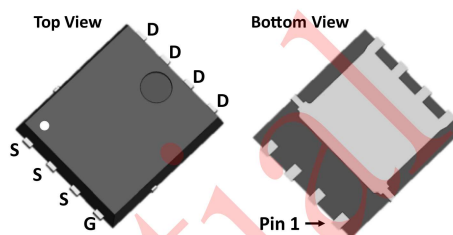
Applications

- Load Switch
- Battery Protection
- DC to DC Converters
- Synchronous Rectifier
- Motor Drive

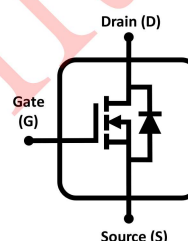
30V N-Channel MOSFETs

$V_{(BR)DSS}$	$R_{DS(ON)}$ Max.	I_D
30 V	4.5 mΩ @ 10 V	82 A
	6.4 mΩ @ 4.5 V	

PPAK5x6-8L



Pin Configuration



Absolute Maximum Ratings ($T_J=25^\circ\text{C}$, unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{DS}	Drain-Source Voltage	30	V
V_{GS}	Gate-Source Voltage	± 20	
I_D	Drain Current-Continuous ^A	$T_C=25^\circ\text{C}$	A
		$T_C=100^\circ\text{C}$	
I_{DM}	Drain Current-Pulsed ^{A, B}	$T_C=25^\circ\text{C}$	A
I_{AS}	Non-repetitive Avalanche Current ^E	48	A
E_{AS}	Single Pulse Drain-to-Source Avalanche Energy ^E	115	mJ
P_D	Maximum Power Dissipation	$T_C=25^\circ\text{C}$	W
		$T_C=100^\circ\text{C}$	
T_J, T_{STG}	Operating and Storage Temperature Range	-55 to +150	$^\circ\text{C}$

Thermal Characteristics

Symbol	Parameter	Conditions	Value	Unit
$R_{\theta JA}$	Junction-to-Ambient ^C	Steady State	62	$^\circ\text{C/W}$
$R_{\theta JC}$	Junction-to-Case	Steady State	1.7	$^\circ\text{C/W}$