

45V, 5.5mΩ, 80A, Single N-Channel

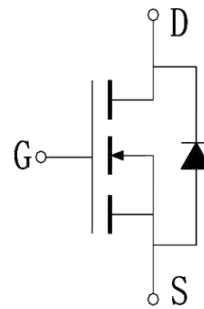
1.Features

- ◆ 45V MOSFET technology
- ◆ Low on-state resistance
- ◆ Fast switching
- ◆ $V_{GS} \pm 20V$

V_{DS}	$R_{DS(on)}$ Typ.	I_D Max.
45V	5.5mΩ @ 10V	80A
	8.5mΩ @ 4.5V	

2.Applications

- ◆ Power Switching Application
- ◆ Load Switching



Schematic Diagram

3.Absolute Max Ratings at $T_a=25^\circ C$ (Note1)

Parameter	Symbol	Maximum	Units
Drain to Source Voltage	V_{DSS}	45	V
Gate to Source Voltage	V_{GSS}	± 20	V
Drain Current (DC)	I_D	80	A
Drain Current (Pulse), $PW \leq 300\mu s$	I_{DP}	216	A
Total Dissipation	P_D	100	W
Avalanche Energy, Single Pulsed	E_{AS}	200	mJ
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature	T_{stg}	-55 to +150	$^\circ C$

Note 1: Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

4.Thermal Resistance Ratings

Parameter	Symbol	Value	Unit
Junction to case	$R_{\theta JC}$	1.5	$^\circ C/W$

Note 2 : When mounted on 1 inch square copper board $t \leq 10sec$ The value in any given application depends on the user's specific board design.