

N and P-Channel Enhancement Mode Power MOSFET

Description

The SS4025A uses advanced trench technology to provide excellent $R_{DS(ON)}$ and low gate charge. The complementary MOSFETs may be used to form a level shifted high side switch, and for a host of other applications.

General Features

● N-Channel

$$V_{DS} = 40V, I_D = 25A$$

$$R_{DS(ON)} < 19m\Omega @ V_{GS}=10V$$

$$R_{DS(ON)} < 29m\Omega @ V_{GS}=4.5V$$

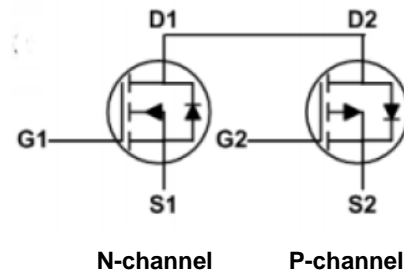
● P-Channel

$$V_{DS} = -40V, I_D = -20A$$

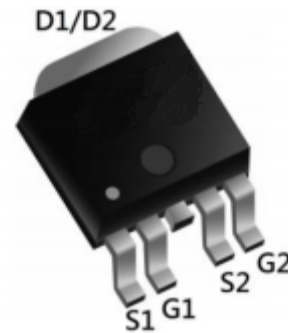
$$R_{DS(ON)} < 35m\Omega @ V_{GS}=-10V$$

$$R_{DS(ON)} < 45m\Omega @ V_{GS}=-4.5V$$

- High power and current handling capability
- Lead free product is acquired
- Surface mount package



Schematic diagram



pin assignment

Package Marking and Ordering Information

Device Marking	Device	Device Package	Reel Size	Tape width	Quantity
SS4025A	SS4025A	TO252-4L	Ø330mm	16mm	2500 units

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

Parameter		Symbol	N-Channel	P-Channel	Unit
Drain-Source Voltage		V_{DS}	40	-40	V
Gate-Source Voltage		V_{GS}	± 20	± 20	V
Continuous Drain Current	$T_A=25^\circ\text{C}$	I_D	25	-20	A
	$T_A=70^\circ\text{C}$		18	-16	
Pulsed Drain Current ^(Note 1)		I_{DM}	50	-40	A
Maximum Power Dissipation	$T_A=25^\circ\text{C}$	P_D	25	23	W
Operating Junction and Storage Temperature Range		T_J, T_{STG}	-55 To 150	-55 To 150	$^\circ\text{C}$