

General Description

The MY3D025C is the highest performance trench N-ch MOSFETs with extreme high ell density, which provide excellent $R_{DS(ON)}$ and gate charge for most of the small power switching and load switch applications.

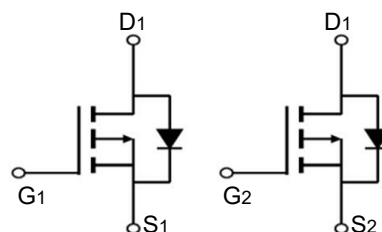
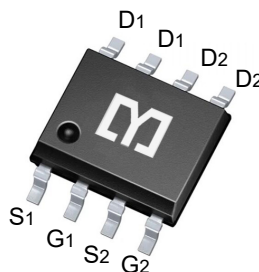


Features

V_{DSS}	-25	V
I_D	-3	A
$R_{DS(ON)}$ (at $V_{GS}=4.5V$)	<62	m Ω
$R_{DS(ON)}$ (at $V_{GS}=2.5V$)	<88	m Ω

Application

- Battery protection
- Load switch
- Uninterruptible power supply



Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
MY3D025C	SOP-8	N/A	3000

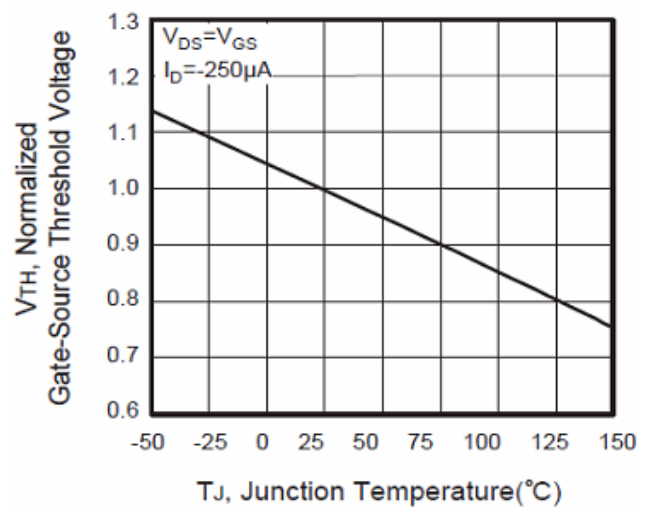
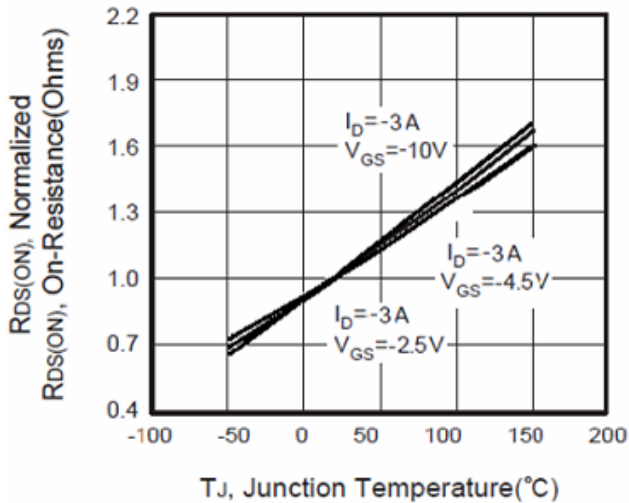
Absolute Maximum Ratings ($T_c=25^{\circ}C$ unless otherwise noted)

Parameter	Symbol	Limit	Unit
Drain-Source Voltage	V_{DS}	-25	V
Gate-Source Voltage	V_{GS}	± 12	V
Drain Current-Continuous	I_D	-3	A
Drain Current-Pulsed (Note 1)	I_{DM}	-1	A
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 To 150	$^{\circ}C$

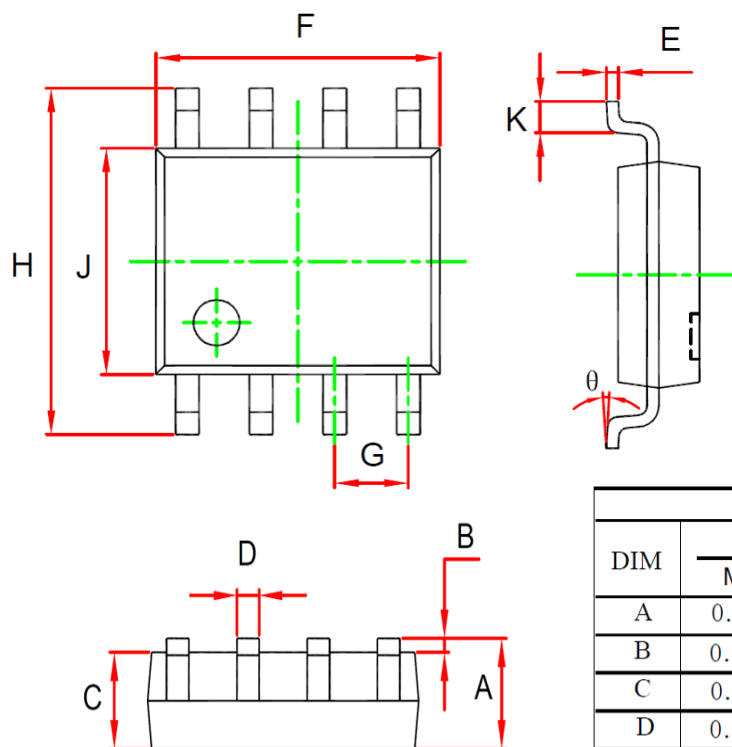
Electrical Characteristics ($T_A=25^\circ\text{C}$, unless otherwise noted)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Off Characteristics						
Drain-Source Breakdown Voltage	B_{VDSS}	$V_{GS} = 0V, I_D = -250\mu A$	-25	--	-23	V
Static Drain-Source On-Resistance ²	$R_{DS(on)}$	$V_{GS} = -4.5V, I_D = -3A$	--	62.0	90.0	m Ω
	$R_{DS(on)}$	$V_{GS} = -2.5V, I_D = -3A$	--	88.0	120.0	
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS} = V_{GS}, I_D = -250\mu A$	-0.4	-0.7	-1	V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS} = -25V, V_{GS} = 0V, T_J=25^\circ\text{C}$	--	--	1	μA
Gate-Body Leakage Current	I_{GSS}	$V_{GS} = \pm 12V$	--	--	± 100	μA
Drain Current-Continuous	I_D				-3	A

Typical Electrical and Thermal Characteristics



Package Mechanical Data-SOP-8



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.053	0.069	1.350	1.750	
B	0.004	0.010	0.100	0.250	
C	0.053	0.061	1.350	1.550	
D	0.013	0.020	0.330	0.510	
E	0.007	0.010	0.170	0.250	
F	0.189	0.197	4.800	5.000	
G	0.050 (BSC)		1.270 (BSC)		
H	0.228	0.244	5.800	6.200	
J	0.150	0.157	3.800	4.000	
K	0.016	0.050	0.400	1.270	
θ	0°	8°	0°	8°	