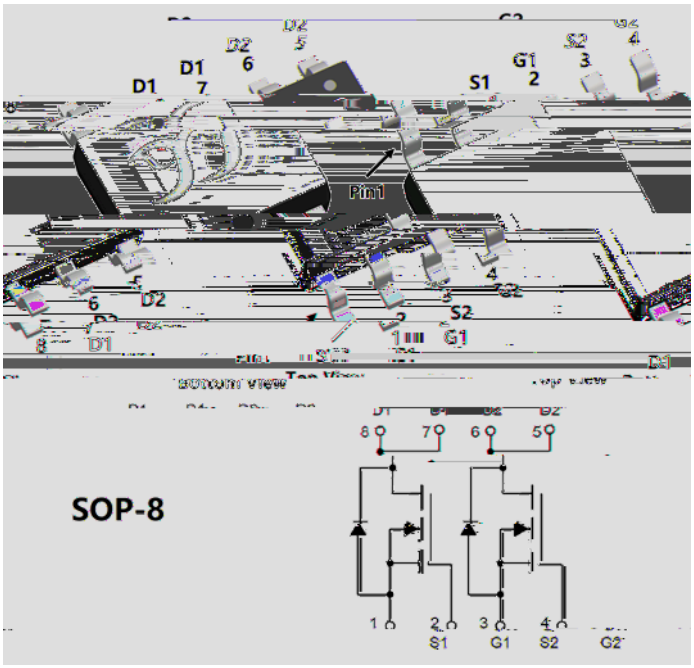
N-Channel Enhancement Mode Field Effect Transistor



Product Summary

- V_{DS} 60V
- I_D 5.0A
- $R_{DS(ON)}$(at V_{GS}= 10V) 44mohm
- $R_{DS(ON)}$(at V_{GS}= 4.5V) 49mohm

General Description

- Trench Power MV MOSFET technology
- High density cell design for Low $R_{DS(ON)}$
- High Speed switching
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free

Applications

- Battery protection
- Load switch
- Power management

■ Absolute Maximum Ratings (T_A=25 unless otherwise noted)

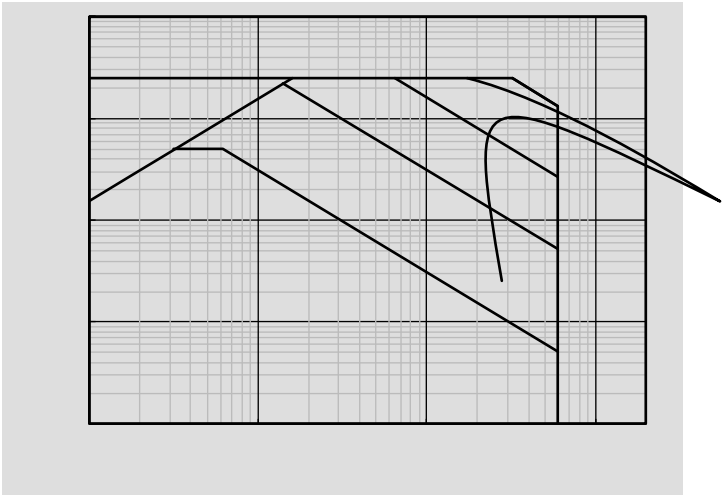
Parameter		Symbol	Maximum	Unit
Drain-source Voltage		V_{DS}	60	V
Gate-source Voltage		V_{GS}	±20	V
Drain Current	T_A=25 ł @ Steady State	I_D	5.0	A
	T_A=70 ł @ Steady State		4.0	
	T_A=125 ł @ Steady State		2.2	
Pulsed Drain Current [A]		I_{DM}	25	A
Total Power Dissipation @ T_A=25 ł		P_D	3.1	W
Thermal Resistance Junction-to-Ambient @ Steady State [B]		$R_{\theta JA}$	40.3	ł / W
Avalanche energy [C]		EAS	30.25	mJ

Junction and Storage Temperature Range T_J ,T_{STG} -55 +150 ł OUTER CARTO

					QUANTITY(pcs)	DELIVERY MODE
YJS05N06A	F2	Q05N06	4000	8000	64000	13“ reel

■ **Electrical Characteristics** (T_J=25 unless otherwise noted)

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Static Parameter						
Drain-Source Breakdown Voltage	BV_{DSS}	V_{GS}= 0V, I_D=250μA	60			V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=60V,V_{GS}=0V			1	μA
		V_{DS}=60V,V_{GS}=0V, Tj=125 ł			100	
Gate-Body Leakage Current	I_{GSS}	V_{GS}= ±20V, V_{DS}=0V			±100	nA
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}= V_{GS}, I_D				



■SOP-8 Package information

SYMBOL	MIN.		
	0.053	0.069	
B	0.004	0.010	
		0.061	
D		0.020	
E			
F			
G	0.050BSC		1.270BSC
H			
J			
K			
	0°		

Disclaimer

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