Descriptions

Dual P-Channel MOSFET in a SOP-8 Plastic Package.

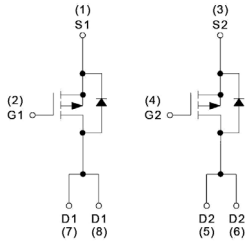
Features

Super high dense cell design for low $R_{DS(ON)}$,Rugged and reliable. HF Product.

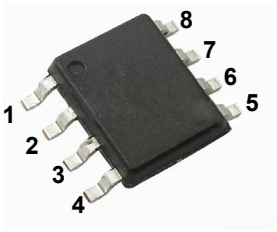
Applications

Power Management in Notebook computer, Portable Equipment and Battery powered systems.

Equivalent Circuit



Pinning



PIN1：S1　PIN 2：G1　PIN 3：S2　PIN 4：G2

PIN 5：D2　PIN 6：D2　PIN 7：D1　PIN 8：D1

Marking

Marking	4953

Absolute Maximum Ratings(Ta=25℃)

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	-30	V
Gate-Source Voltage	V_{GSS}	±20	V
Continuous Drain Current	I_D *	-4.9	A
Pulsed Drain Current	I_{DM}*	-20	A
Diode Continuous Forward Current	I_S*	-2.0	A
Power Dissipation for Single Operation	P_D* (Ta=25℃)	2	W
Power Dissipation for Single Operation	P_D* (Ta=100℃)	0.8	W
Maximum Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55 ~ 150	℃
Thermal Resistance-Junction to Ambient	$R_{\theta JA}$*	62.5	℃/W

Note:

* Surface Mounted on 1in2 pad area, t ≤ 10sec.

Electrical Characteristics(Ta=25℃)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	V_{GS}=0V I_{DS}=-250μA	-30			V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=-24V V_{GS}=0V			-1	μA
		V_{DS}=-24V V_{GS}=0V T_J=85°C			-30	
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}=VGS I_{DS}=-250μA	-1.0	-1.45	-2.0	V
Gate Leakage Current	I_{GSS}	V_{GS}=±20V V_{DS}=0V			±100	nA
Drain-Source On-state Resistance	$R_{DS(ON)}$[a]	V_{GS}=-10V I_{DS}=-4.9A		53	60	mΩ
		V_{GS}=-4.5V I_{DS}=-3.6A		80	95	
Diode Forward Voltage	V_{SD}[a]	V_{GS}=0V I_{SD}=-3.0A		-0.7	-1.3	V
Total Gate Charge	Q_g[b]	V_{DS}=-15V V_{GS}=-10V I_{DS}=-4.9A		22.6	30	nC
Gate-Source Charge	Q_{gs}[b]			4.7		nC
Gate-Drain Charge	Q_{gd}[b]			2.0		nC

Electrical Characteristics(Ta=25℃)

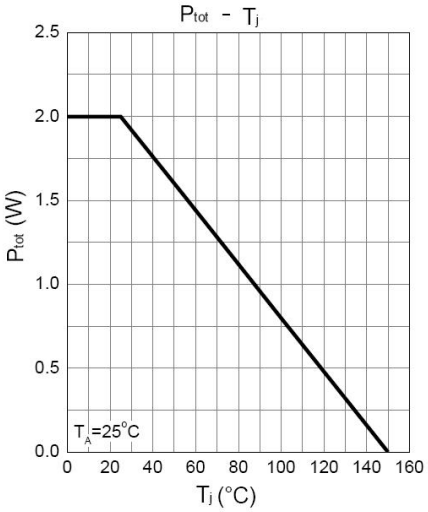
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Gate Resistance	R_G [b]	V_{GS}=0V V_{DS}=0V F=1MHz		11		Ω
Input Capacitance	C_{iss} [b]	V_{GS}=0V V_{DS}=-25V Frequency=1.0MHz		1260		pF
Output Capacitance	C_{oss} [b]			400		
Reverse Transfer Capacitance	C_{rss} [b]			220		
Turn-on Delay Time	$t_{d(ON)}$ [b]	V_{DD}=-15V R_L=15Ω I_{DS}=-1A V_{GEN}=-10V R_G=6Ω		10	18	ns
Turn-on Rise Time	T_r [b]			15	20	
Turn-off Delay Time	$T_{d(OFF)}$ [b]			22	38	
Turn-off Fall Time	T_f [b]			15	25	

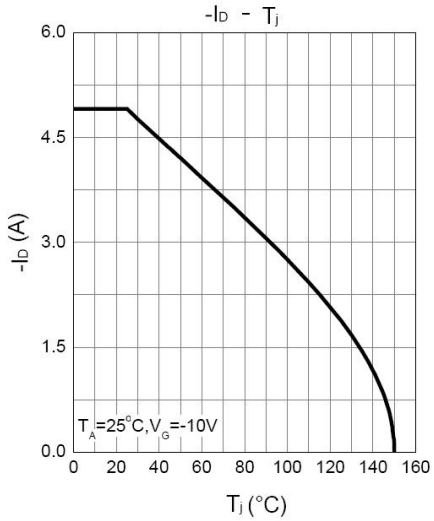
Notes:

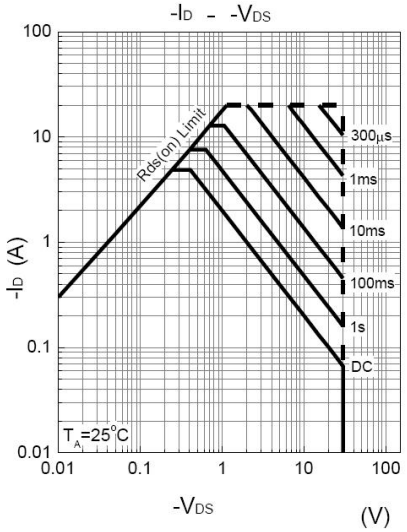
a : Pulse test ; pulse width≤300μs, duty cycle≤2%.

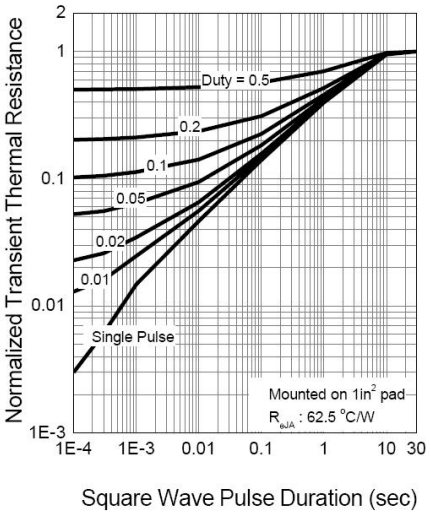
b : Guaranteed by design, not subject to production testing.

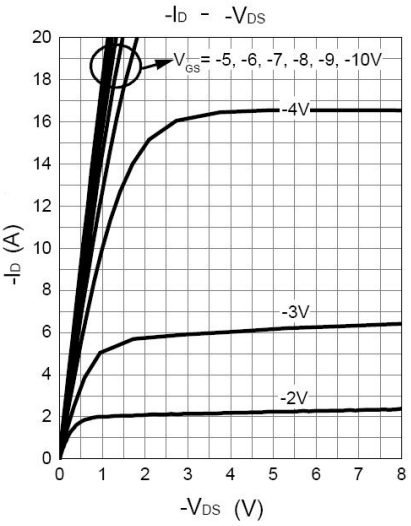
Electrical Characteristic Curve

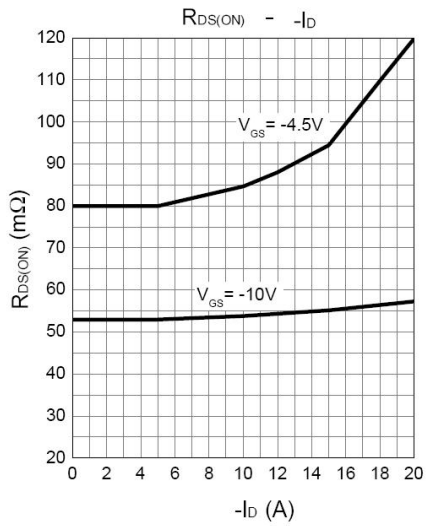




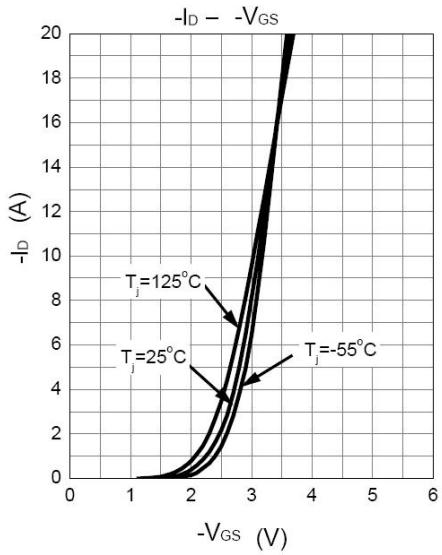


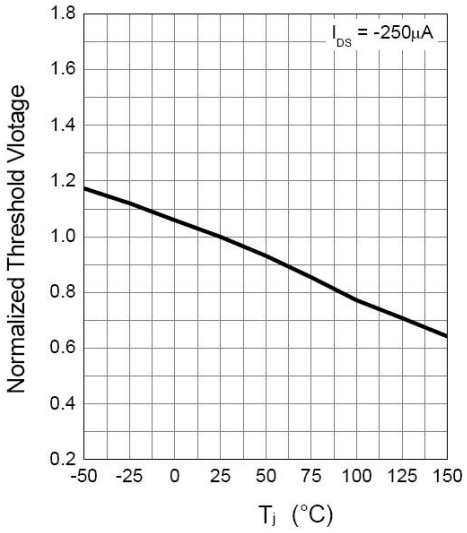


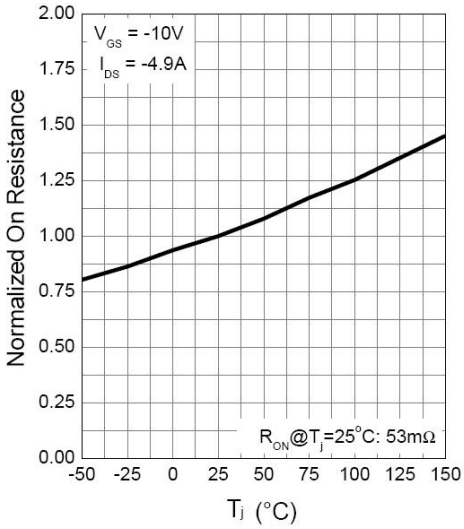


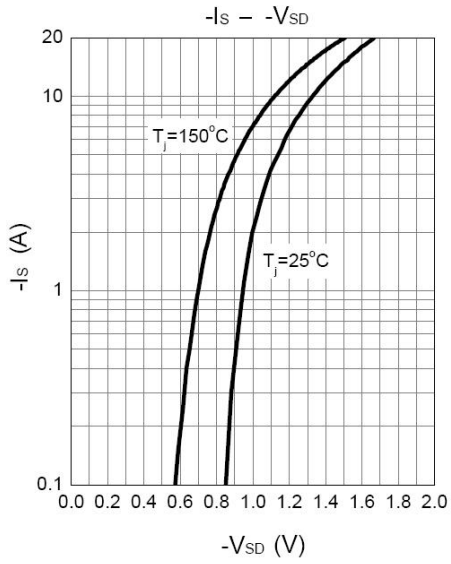


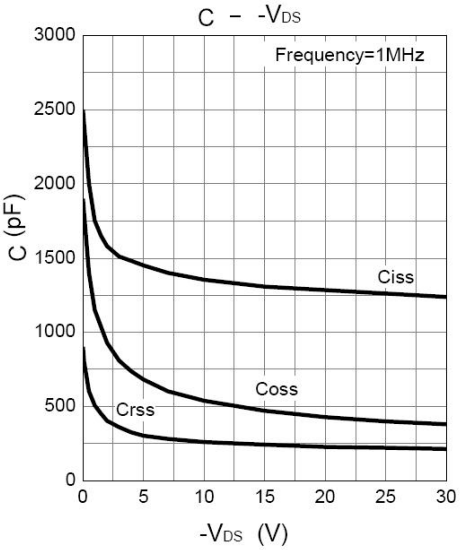
Electrical Characteristic Curve

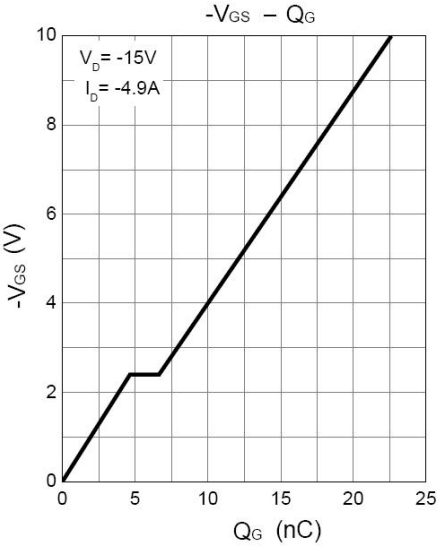






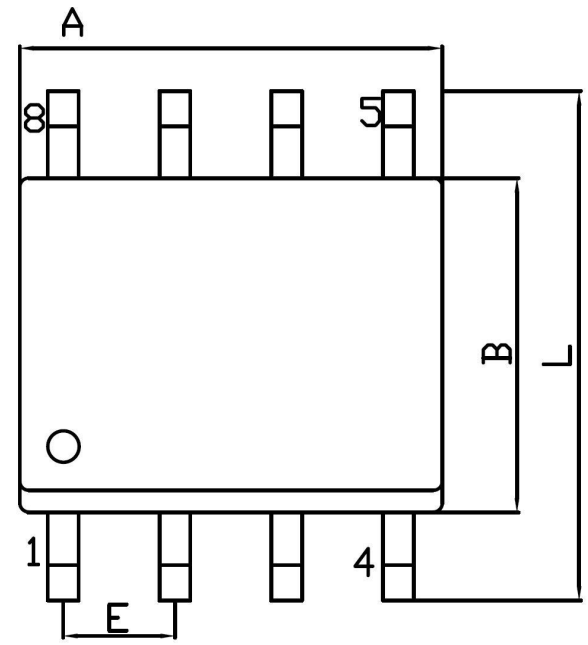


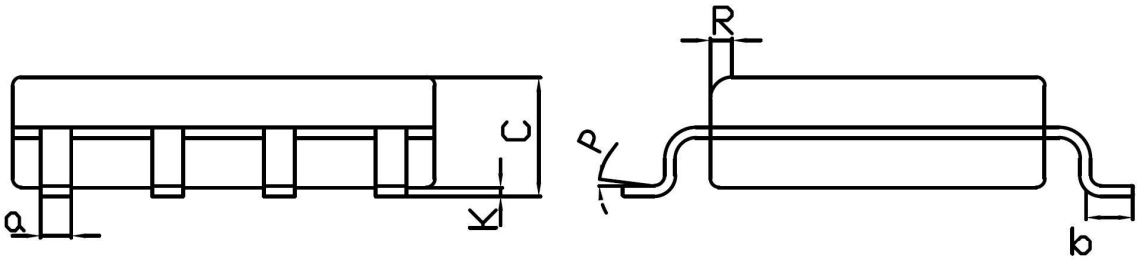




Package Dimensions

SOP-8 Unit:mm





Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
A	4.70	5.10	C	1.35	1.75
B	3.70	4.10	a	0.35	0.49
L	5.80	6.20	R	0.30	0.60
E	1.27BSC		P	0°	7°
K	0.12	0.22	b	0.40	1.25