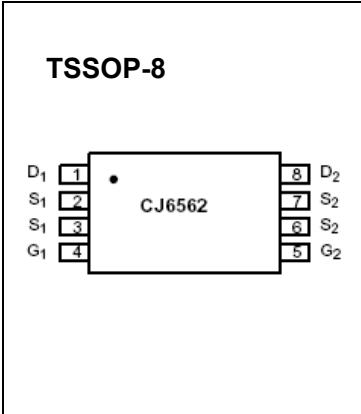
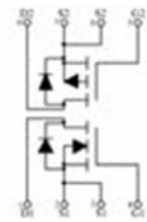


TSSOP-8 Plastic-Encapsulate Transistors

CJS6562 N- and P-Channel 2.5-V(G-S) MOSFET

Equivalent circuit



Maximum ratings (T_a=25°C unless otherwise noted)

Parameter		Symbol	N-Channel	P-Channel	Unit
Drain-Source Voltage		V _{DS}	20	-20	V
Gate-Source Voltage		V _{GS}	±12	±12	
Continuous Drain Current (T _J =150°C) ^a	T _a =25°C	I _D	4.5	-3.5	A
	T _a =70°C		3.6	-2.7	
Pulsed Drain Current		I _{DM}	30	-30	
Continuous Source Current(Diode Conduction) ^a		I _S	1.25	-1.25	
Power Dissipation ^a	T _a =25°C	P _D	1.0		W
	T _a =70°C		0.64		
Maximum Junction-to-Ambient ^a		R _{thJA}	125		°C/W
Operating Junction and Storage Temperature		T _J , T _{stg}	-55 ~150		°C

Notes :

a. Surface Mounted on FR4 board, t≤10S

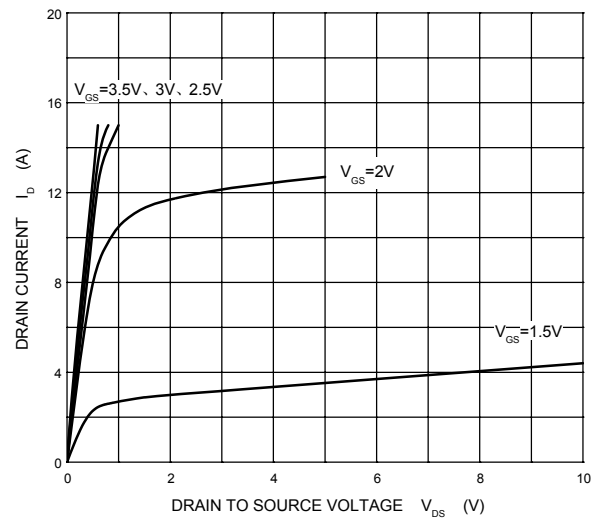
Electrical characteristics (T_a=25°C unless otherwise noted)

Parameter	Symbol	Test Condition		Min	Typ	Max	Units
Static							
Gate-Threshold Voltage	V _{GS(th)}	V _{DS} =V _{GS} , I _D =250μA	N-Ch	0.6		1.2	V
		V _{DS} =V _{GS} , I _D =-250μA	P-Ch	-0.6		-1.2	
Gate-Body Leakage	I _{GSS}	V _{DS} =0V, V _{GS} =±12V	N-Ch P-Ch			±100	nA
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} =20V, V _{GS} =0V	N-Ch			1	μA
		V _{DS} =-20V, V _{GS} =0V	P-Ch			-1	
		V _{DS} =20V, V _{GS} =0V ,T _J =55℃	N-Ch			25	
		V _{DS} =-20V, V _{GS} =0V ,T _J =55℃	P-Ch			-25	
On-State Drain Current ^a	I _{D(on)}	V _{DS} ≥5V, V _{GS} =4.5V	N-Ch	30			A
		V _{DS} ≥-5V, V _{GS} =-4.5V	P-Ch	-30			
Drain-Source On-Resistance ^a	R _{DS(on)}	V _{GS} =4.5V, I _D =4.5A	N-Ch		0.023	0.030	Ω
		V _{GS} =-4.5V, I _D =-3.5A	P-Ch		0.040	0.050	
		V _{GS} =2.5V, I _D =3.9A	N-Ch		0.032	0.040	
		V _{GS} =-2.5V, I _D =-2.7A	P-Ch		0.061	0.090	
Forward Transconductance ^a	g _{fs}	V _{DS} =10V, I _D =4.5A	N-Ch	4			S
		V _{DS} =-10V, I _D =-3.5A	P-Ch	5			
Diode Forward Voltage ^a	V _{SD}	I _S =1.25A,V _{GS} =0V	N-Ch		0.65	1.2	V
		I _S =-1.25A,V _{GS} =0V	P-Ch		0.72	-1.2	
Dynamic ^b							
Total Gate Charge	Q _g	N-Channel	N-Ch			25	nC
			P-Ch			25	
Gate-Source Charge	Q _{gs}	V _{DS} =15V,V _{GS} =4.5V,I _D =4.5A	N-Ch		3.0		
		P-Channel	P-Ch		3.5		
Gate-Drain Charge	Q _{gd}	V _{DS} =-15V,V _{GS} =-4.5V,I _D =-3.5A	N-Ch		3.3		
			P-Ch		3.5		
Turn-On Delay Time	t _{d(on)}	N-Channel V _{DD} =10V,R _L =10Ω, I _D ≈1A, V _{GEN} =10V,R _G =6Ω P-Channel V _{DD} =-10V,R _L =10Ω, I _D ≈-1A, V _{GEN} =-10V,R _G =6Ω	N-Ch			50	ns
	P-Ch				50		
Rise Time	t _r		N-Ch			80	
			P-Ch			60	
Turn-Off Delay Time	t _{d(off)}		N-Ch			100	
			P-Ch			100	
Fall Time	t _f		N-Ch			40	
			P-Ch			40	
Source- Drain Reverse Recovery Time	t _{rr}	I _F =1.25A,di/dt=100A/μs	N-Ch			60	
		I _F =-1.25A,di/dt=100A/μs	P-Ch			100	

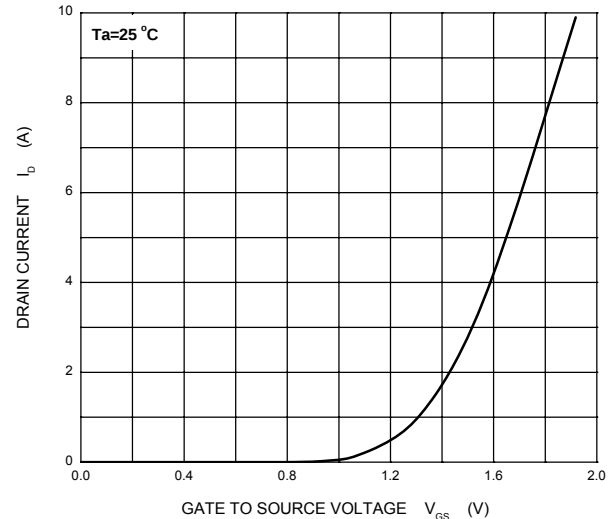
Notes :

- Pulse Test : Pulse Width ≤ 300μs, duty cycle ≤ 2%.
- Guaranteed by design, not subject to production testing.

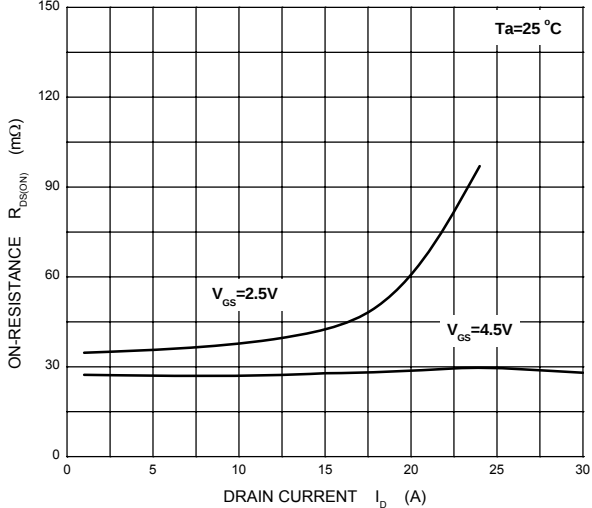
Output Characteristics



Transfer Characteristics



$R_{DS(ON)}$ — I_D



$R_{DS(ON)}$ — V_{GS}

