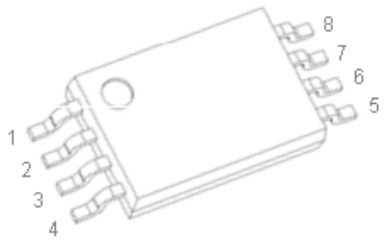
JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

TSSOP-8 Plastic-Encapsulate Transistors

CJS6562 N- and P-Channel 12-V(G-S) MOSFET

TSSOP8



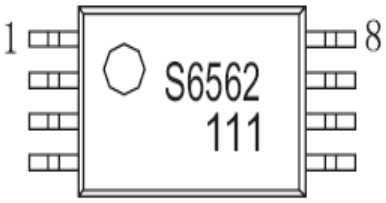
P-channel

$V_{(BR)DSS}$	$R_{DS(on)}$MAX	I_D
-20V	50mΩ@-4.5V	-3.5A
	90mΩ@-2.5V	

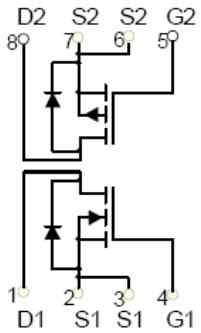
N-channel

$V_{(BR)DSS}$	$R_{DS(on)}$MAX	I_D
20V	30mΩ@4.5V	4.5A
	40mΩ@2.5V	

MARKING



Equivalent Circuit



Maximum ratings (T_a=25℃ 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℃)[a]	T_a=25℃	I_D	4.5	-3.5	A
	T_a=70℃		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℃	P_D	1.0		W
	T_a=70℃		0.64		
Maximum Junction-to-Ambient[a]		R_{thJA}	125		℃/W
Operating Junction and Storage Temperature		T_J, T_{stg}	-55 ~150		℃

Notes :

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

MOSFET ELECTRICAL CHARACTERISTICS

T_a=25℃ unless otherwise specified

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 V_{DS} =15V,V_{GS} =4.5V,I_D =4.5A P-Channel V_{DS} =-15V,V_{GS} =-4.5V,I_D =-3.5A	N-Ch			25	nC
			P-Ch			25	
Gate-Source Charge	Q_{gs}		N-Ch		3.0		
			P-Ch		3.5		
Gate-Drain Charge	Q_{gd}		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 :

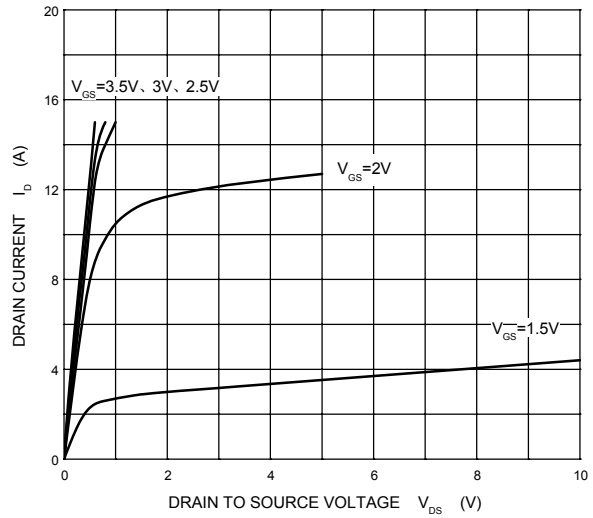
a. Pulse Test : Pulse Width≤300μs, duty cycle ≤2%.

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

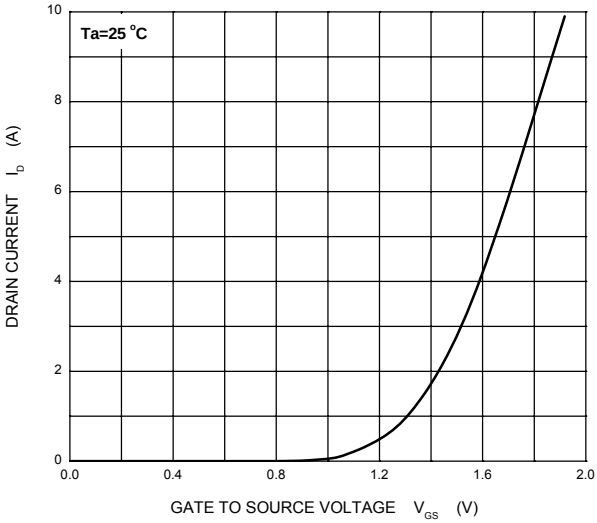
N-channel MOSFET ELECTRICAL CHARACTERISTICS

T_a=25℃ unless otherwise specified

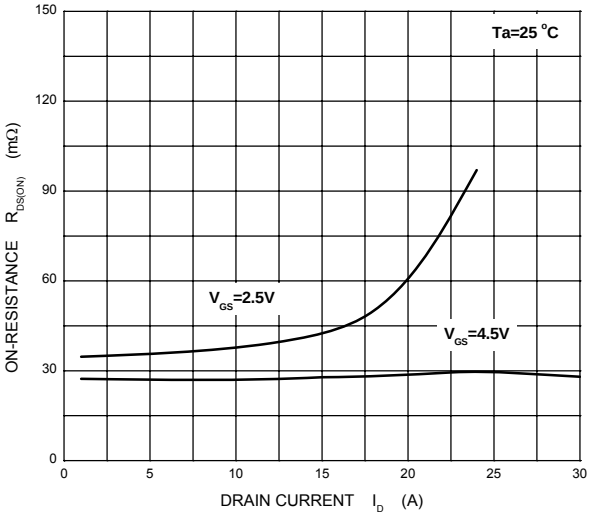
Output Characteristics



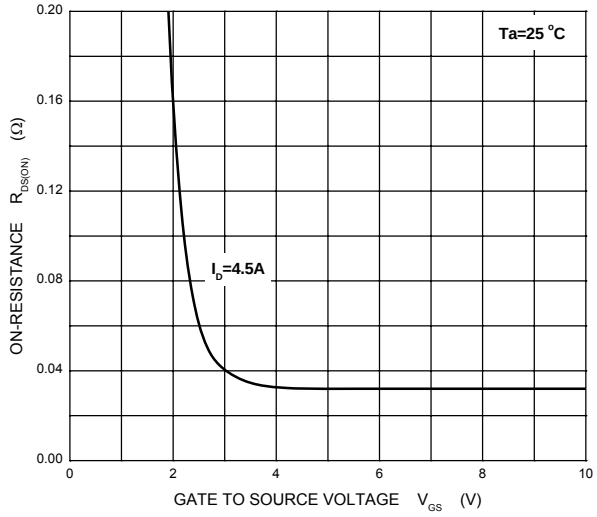
Transfer Characteristics



$R_{DS(ON)}$ — I_D



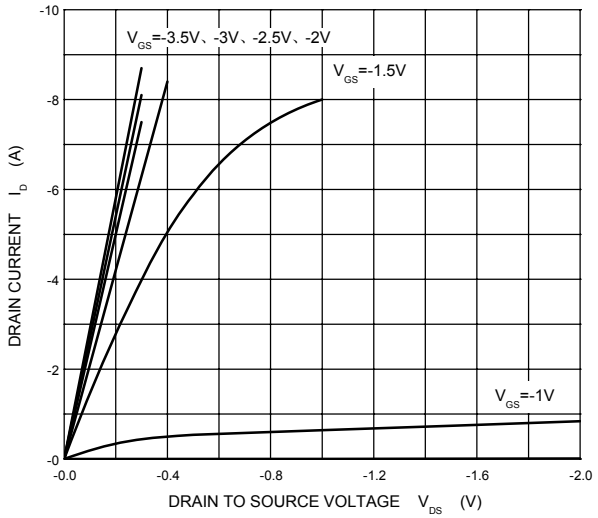
$R_{DS(ON)}$ — V_{GS}



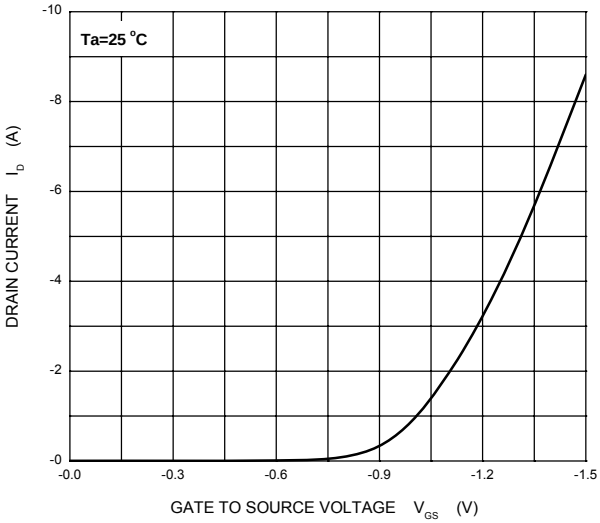
P-channel MOSFET ELECTRICAL CHARACTERISTICS

T_a=25℃ unless otherwise specified

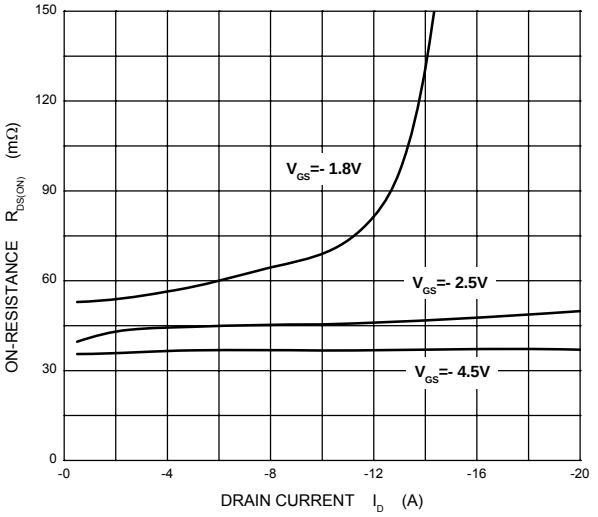
Output Characteristics



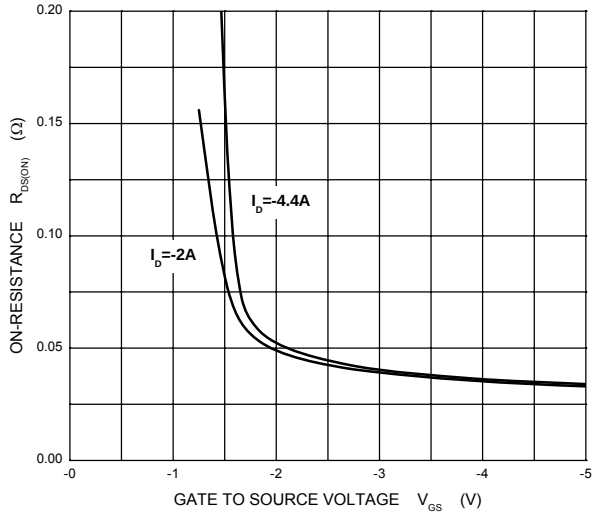
Transfer Characteristics



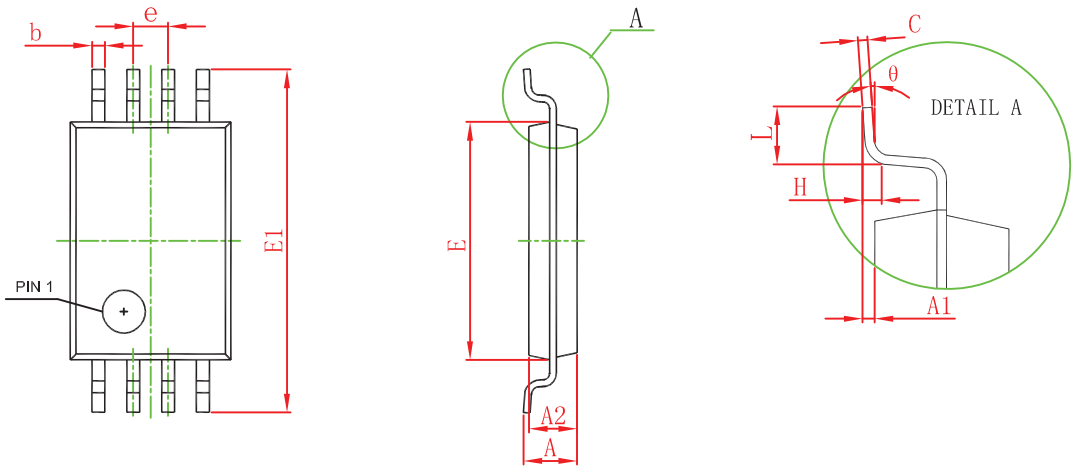
$R_{DS(ON)}$ — I_D



$R_{DS(ON)}$ — V_{GS}

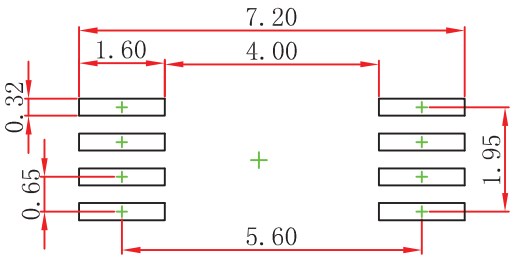


TSSOP8 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	**Max**	**Min**	**Max**
D	2. 900	3. 100	0. 114	0. 122
E	4. 300	4. 500	0. 169	0. 177
b	0. 190	0. 300	0. 007	0. 012
c	0. 090	0. 200	0. 004	0. 008
E1	6. 250	6. 550	0. 246	0. 258
A		1. 200		0. 047
A2	0. 800	1. 000	0. 031	0. 039
A1	0. 050	0. 150	0. 002	0. 006
e	0. 65 (BSC)		0. 026 (BSC)	
L	0. 500	0. 700	0. 020	0. 028
H	0.25(TYP)		0.01(TYP)	
θ	1°	7°	1°	7°

TSSOP8 Suggested Pad Layout



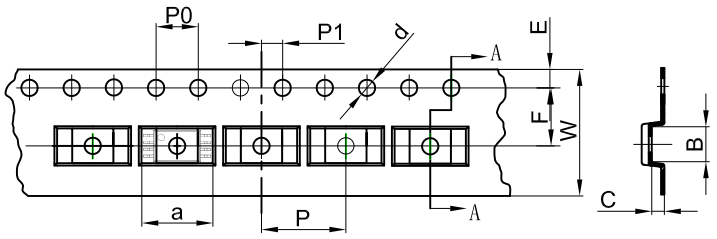
Note:
1.Controlling dimension:in millimeters.
2.General tolerance:± 0.05mm.
3.The pad layout is for reference purposes only.

NOTICE

JCET reserve the right to make modifications,enhancements, improvements, corrections or other changes without further notice to any product herein.JCET does not assume any liability arising out of the application or use of any product described herein.

TSSOP8 Tape and Reel

TSSOP8 Embossed Carrier Tape



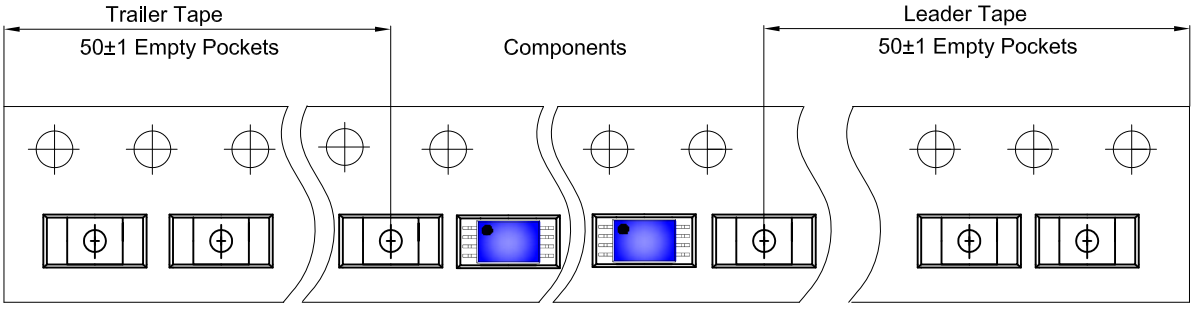
Packaging Description:

TSSOP8 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 3,000 units per 13" or 33cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

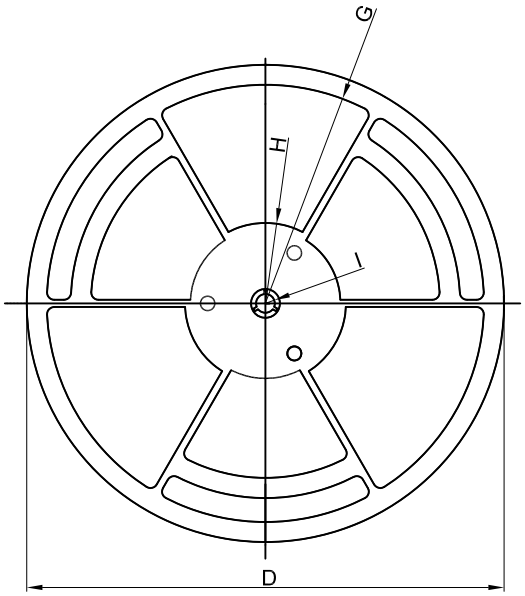
ALL DIM IN mm

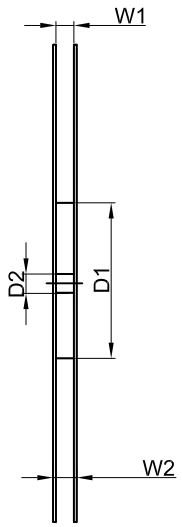
Dimensions are in millimeter										
Pkg type	a	B	C	d	E	F	P0	P	P1	W
TSSOP8	6.76	3.30	1.20	Ø1.50	1.75	5.50	4.00	8.00	2.00	12.00

TSSOP8 Tape Leader and Trailer



TSSOP8 Reel





Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	W2
13"Dia	Ø330.00	100.00	13.00	R151.00	R56.00	R6.50	12.40	17.60

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
3,000 pcs	13 inch	3,000 pcs	336×336×48	24,000 pcs	445×355×365	