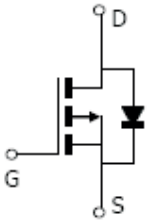
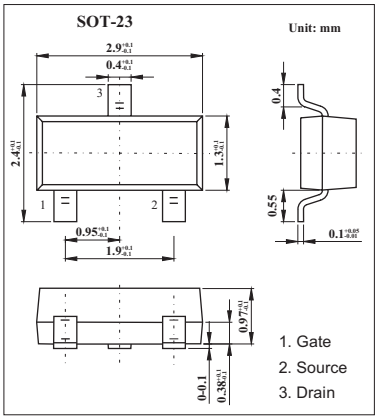
Features

- $V_{DS\ (V)}$ = -30V
- I_D =-2.6 A (V_{GS}=-10V)
- $R_{DS(ON)}$ < 130 mΩ (V_{GS} = -10V)
- $R_{DS(ON)}$ < 180 mΩ (V_{GS} = -4.5V)
- $R_{DS(ON)}$ < 260mΩ (V_{GS} = -2.5V)





Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	-30	V
Gate-Source Voltage	V_{GS}	±12	V
Continuous Drain TA=25℃	I_D	-2.6	A
Current *1 TA=70℃		-2.2	
Pulsed Drain Current *2	I_{DM}	-20	
Power Dissipation *1 TA=25℃	P_D	1.4	W
TA=70℃		1	
Junction and Storage Temperature Range	T_J, T_{STG}	-55 to 150	℃

*1The value of $R_{\theta JA}$ is measured with the device mounted on 1in ^{2} FR-4 board with 2oz. Copper, in a still air environment with T_A =25℃

*2 Repetitive rating, pulse width limited by junction temperature.

Thermal Characteristics

Parameter		Symbol	Typ	Max	Unit
Maximum Junction-to-Ambient*1	t ⩽ 10s	$R_{\theta JA}$	70	90	℃/W
Maximum Junction-to-Ambient *1	Steady-State		100	125	℃/W
Maximum Junction-to-Lead *2	Steady-State	$R_{\theta JL}$	63	80	℃/W

*1The value of $R_{\theta JA}$ is measured with the device mounted on 1in ^{2} FR-4 board with 2oz. Copper, in a still air environment with T_A =25℃

*2 . The $R_{\theta JA}$ is the sum of the thermal impedence from junction to lead $R_{\theta JL}$ and lead to ambient.

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	B_{VDSS}	I_D=-250μA, V_{GS}=0V	-30			V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=-24V, V_{GS}=0V			-1	μA
		V_{DS}=-24V, V_{GS}=0V ,TJ=55℃			-5	
Gate-Body leakage current	I_{GSS}	V_{DS}=0V, V_{GS}=±12V			±100	nA
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}=V_{GS} I_D=-250μA	-0.6	-1	-1.4	V
On state drain current	$I_{D(ON)}$	V_{GS}=-4.5V, V_{DS}=-5V	-10			A
Static Drain-Source On-Resistance	$R_{DS(ON)}$	V_{GS}=-10V, I_D=-2.6A		102	130	mΩ
		V_{GS}=-10V, I_D=-2.6A T_J=125℃		154	200	
		V_{GS}=-4.5V, I_D=-2A		128	180	mΩ
		V_{GS}=-2.5V, I_D=-1A		187	260	mΩ
Forward Transconductance	g_{FS}	V_{DS}=5V, I_D=-2.5A	3	4.5		S
Diode Forward Voltage	V_{SD}	I_S=-1A,V_{GS}=0V		-0.85	-1	V
Maximum Body-Diode Continuous Current	I_S				-2	A
Reverse Transfer Capacitance	C_{iss}	V_{GS}=0V, V_{DS}=-15V, f=1MHz		400	500	pF
Gate resistance	C_{oss}			55		pF
Input Capacitance	C_{rss}			42		pF
Output Capacitance	R_g	V_{GS}=0V, V_{DS}=0V, f=1MHz		12	16	Ω
Total Gate Charge	Q_g	V_{GS}=-4.5V, V_{DS}=-15V, I_D=-2.5A		4.4	5.3	nC
Gate Source Charge	Q_{gs}			0.8		nC
Gate Drain Charge	Q_{gd}			1.32		nC
Turn-On Rise Time	$t_{D(on)}$	V_{GS}=-10V, V_{DS}=-15V, R_L=6Ω,R_{GEN}=3Ω		5.3	8	ns
Turn-Off DelayTime	t_r			4.4	9	ns
Turn-Off Fall Time	$t_{D(off)}$			31.5	45	ns
Turn-On DelayTime	t_f			8	16	ns
Body Diode Reverse Recovery Time	t_{rr}	I_F=-2.5A, dI/dt=100A/μs		15.8	19	ns
Body Diode Reverse Recovery Charge	Q_{rr}	I_F=-2.5A, dI/dt=100A/μs		8	12	nC

■ Marking

Marking	A3