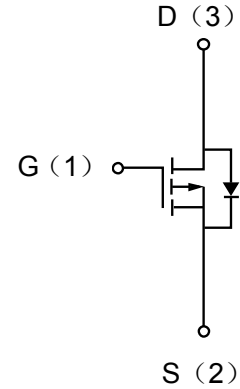


**Description**

The enhancement mode MOS is extremely high density cell and low on-resistance.

MOSFET Product Summary		
V <sub>DS</sub> (V)	R <sub>DS(on)</sub> ( $\Omega$ )	I <sub>D</sub> (A)
-30	0.053 @ V <sub>GS</sub> =-10V	-4.2
	0.065 @ V <sub>GS</sub> =-4.5V	


**Electrical characteristics per line @25°C ( unless otherwise specified)**

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
<b>OFF CHARACTERISTICS</b>						
Drain-Source Breakdown Voltage	BV <sub>DSS</sub>	I <sub>D</sub> = -250 $\mu$ A, V <sub>GS</sub> = 0V	-30	-	-	V
Zero Gate Voltage Drain Current	I <sub>DSS</sub>	V <sub>DS</sub> = -24V, V <sub>GS</sub> = 0V	-	-	-1	$\mu$ A
Gate-Body Leakage Current	I <sub>GSS</sub>	V <sub>DS</sub> = 0V, V <sub>GS</sub> = $\pm$ 12V	-	-	$\pm$ 100	nA
Gate Threshold Voltage	V <sub>GS(th)</sub>	V <sub>DS</sub> = V <sub>GS</sub> , I <sub>D</sub> = -250 $\mu$ A	-0.7		-1.3	V
Static Drain-Source On-Resistance	R <sub>DS(ON)</sub>	V <sub>GS</sub> = -10V, I <sub>D</sub> = -4.2A	-	53	60	m $\Omega$
		V <sub>GS</sub> = -4.5V, I <sub>D</sub> = -4A	-	65	75	m $\Omega$
		V <sub>GS</sub> = -2.5V, I <sub>D</sub> = -2A		86	120	m $\Omega$
Forward Trans conductance	g <sub>FS</sub>	V <sub>GS</sub> = -5V, I <sub>D</sub> = -5A, T <sub>A</sub> = 125°C	7	11		S
<b>DYNAMIC PARAMETERS</b>						
Input Capacitance	C <sub>ISS</sub>	V <sub>GS</sub> = 0V, V <sub>DS</sub> = -15V, f = 1MHz	-	950		pF
Output Capacitance	C <sub>DSS</sub>		-	110		pF
Reverse Transfer Capacitance	C <sub>RSS</sub>		-	75		pF
<b>SWITCHING PARAMETERS</b>						
Turn-On Delay Time	t <sub>d(on)</sub>	V <sub>DD</sub> = -15V, V <sub>GS</sub> = -10V, R <sub>L</sub> = 3.6 $\Omega$ , R <sub>G</sub> = 6 $\Omega$	-		20	ns
Turn-Off Delay Time	t <sub>d(off)</sub>		-		35	ns

Absolute maximum rating@25°C

Rating		Symbol	Value	Units
Drain-Source Voltage		$V_{DS}$	-30	V
Gate-Source Voltage		$V_{GS}$	$\pm 12$	V
Drain Current	Continuous	$I_D$	-4.2	A
	Pulsed	$I_D$	-30	A
Total Power Dissipation	$T_A=25^\circ\text{C}$	$P_D$	1.4	W
	$T_A=125^\circ\text{C}$	$P_D$	1	W

Typical Characteristics

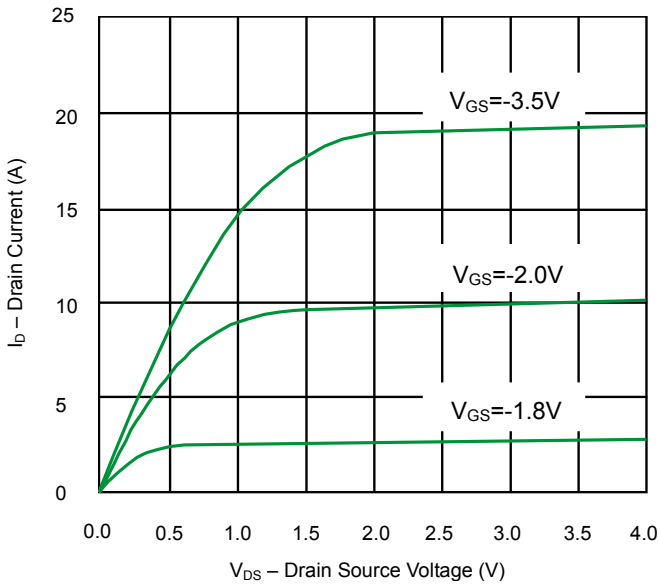


Fig 1. Output Characteristics

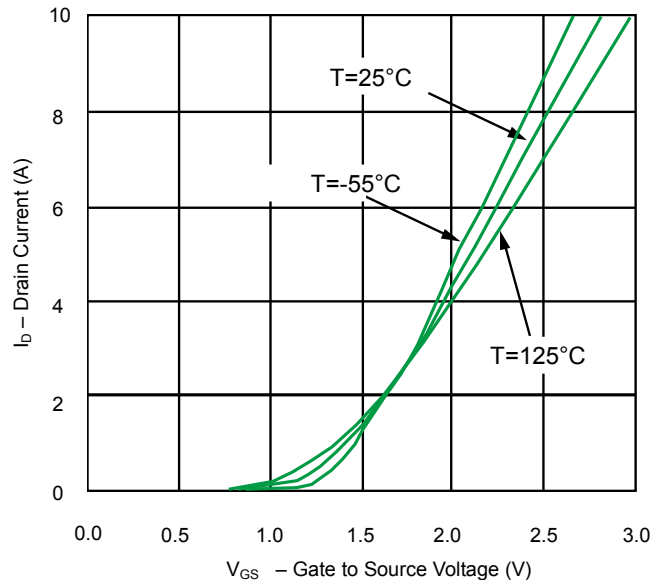


Fig 2. Transfer Characteristics

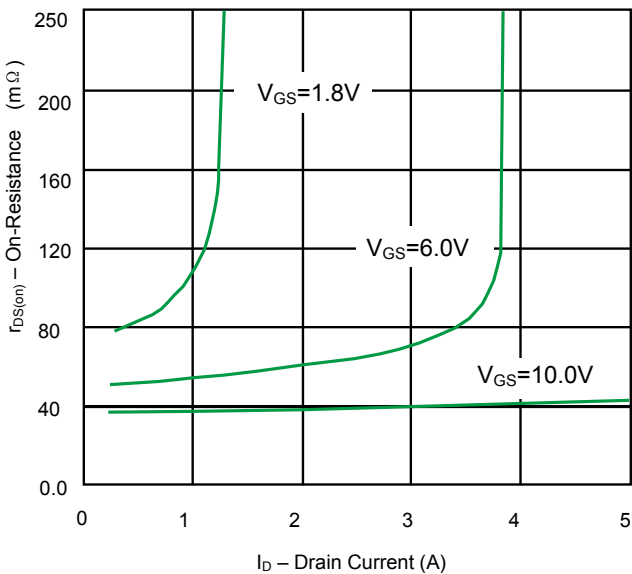


Fig 3. On-Resistance vs. Drain Current

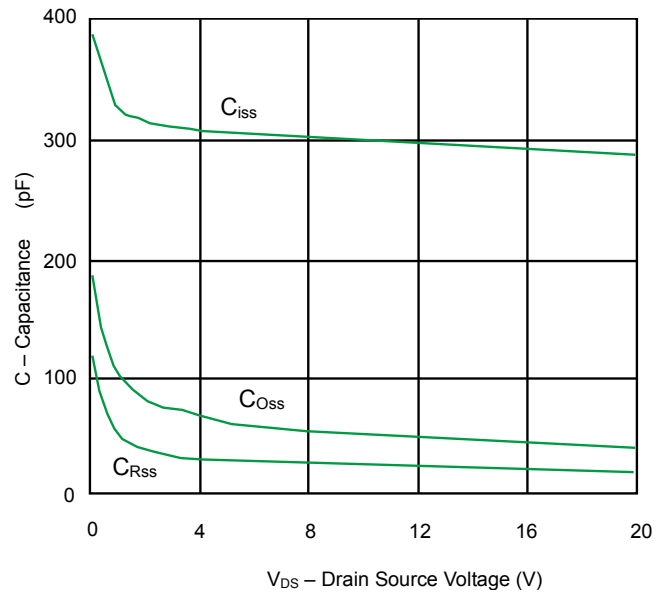
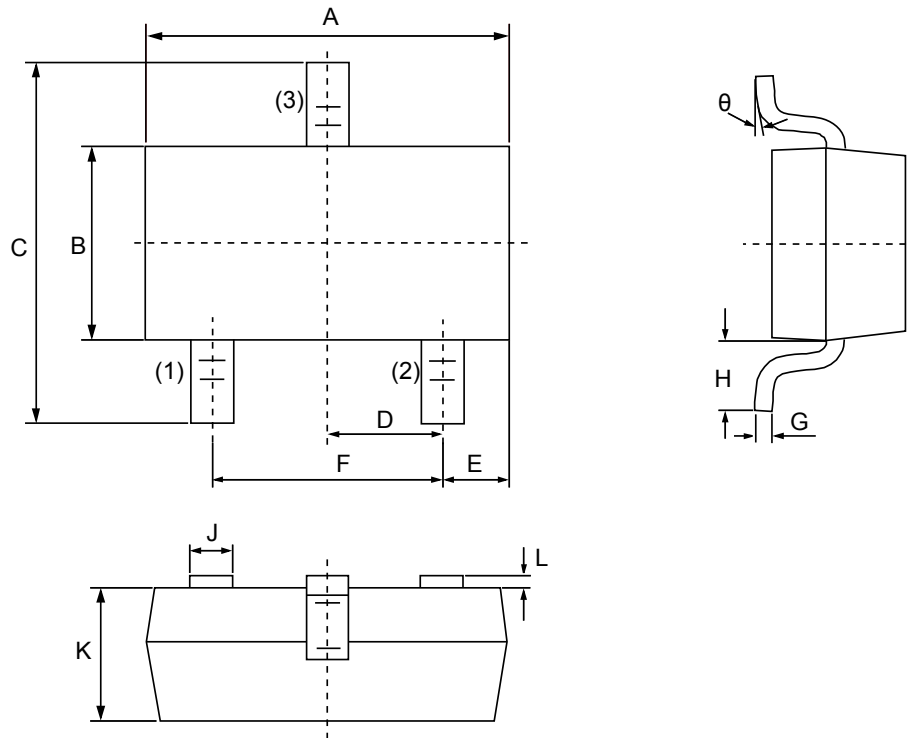



Fig 4. Capacitance

Product dimension(SOT-23)



Dim	Millimeters		Inches	
	MIN	MAX	MIN	MAX
A	2.80	3.04	0.1102	0.1197
B	1.20	1.40	0.0472	0.0551
C	2.10	2.50	0.0830	0.0984
D	0.89	1.02	0.0350	0.0401
E	0.45	0.60	0.0177	0.0236
F	1.78	2.04	0.0701	0.0807
G	0.085	0.177	0.0034	0.0070
H	0.45	0.60	0.0180	0.0236
J	0.37	0.50	0.0150	0.0200
K	0.89	1.11	0.0350	0.0440
L	0.013	0.100	0.0005	0.0040
θ	0°	10°	0°	10°


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