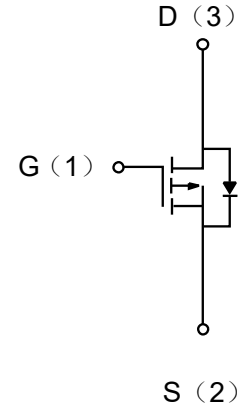


Description

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

MOSFET Product Summary		
V _{DS} (V)	R _{DS(on)} (Ω)	I _D (A)
-20	0.095 @ V _{GS} =-4.5V	-2.8
	0.12 @ V _{GS} =-2.5V	


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

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
OFF CHARACTERISTICS						
Drain-Source Breakdown Voltage	BV _{DSS}	I _D = -250 μ A, V _{GS} = 0V	-20	-	-	V
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} = -16V, V _{GS} = 0V	-	-	-1	μ A
Gate-Body Leakage Current	I _{GSS}	V _{DS} = 0V, V _{GS} = \pm 8V	-	-	\pm 100	nA
Gate Threshold Voltage	V _{GS(th)}	V _{DS} = V _{GS} , I _D = -250 μ A	-0.45		-0.9	V
Static Drain-Source On-Resistance ²	R _{DS(ON)}	V _{GS} = -4.5V, I _D = -2.8A	-	0.11	0.14	Ω
		V _{GS} = -2.5V, I _D = -2.0A	-	0.15	0.18	Ω
		V _{GS} = -1.8V, I _D = -1.0A	-	0.20	0.30	Ω
Forward Tran conductance	g _{FS}	V _{GS} = 5V, I _D = 50mA, T _A = 125°C		6.5		S
DYNAMIC PARAMETERS						
Input Capacitance	C _{ISS}	V _{GS} = 0V, V _{DS} = 10V, f = 1MHz	-	460		pF
Output Capacitance	C _{DSS}		-	155		pF
Reverse Transfer Capacitance	C _{RSS}		-	50		pF
SWITCHING PARAMETERS						
Turn-On Delay Time	t _{d(on)}	V _{DD} = -6V, V _{GS} = -4.5V, R _L = 6 Ω , R _G = 6 Ω , I _D = -1A	-		12	ns
Turn-Off Delay Time	t _{d(off)}		-		35	ns

Absolute maximum rating@25°C

Rating		Symbol	Value	Units
Drain-Source Voltage		V_{DS}	-20	V
Gate-Source Voltage		V_{GS}	± 8	V
Drain Current	Continuous	I_D	-2.8	A
	Pulsed	I_D	-4	A
Total Power Dissipation	$T_A=25^\circ\text{C}$	P_D	350	mW
	$T_A=125^\circ\text{C}$	P_D	225	mW

Typical Characteristics

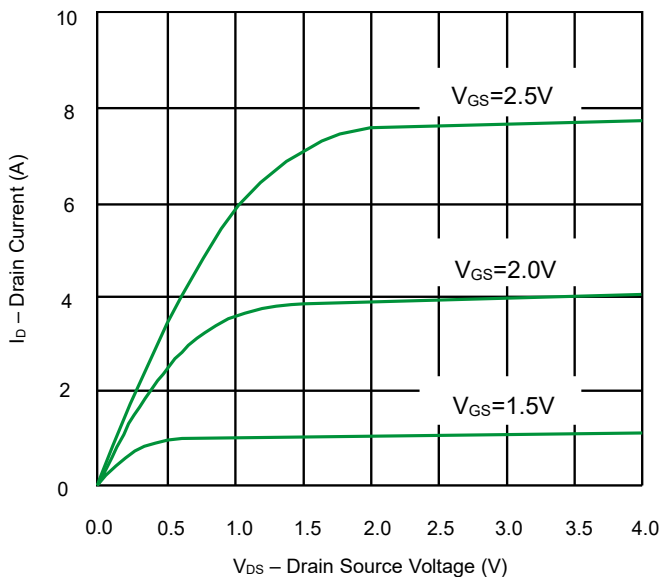


Fig 1. Output Characteristics

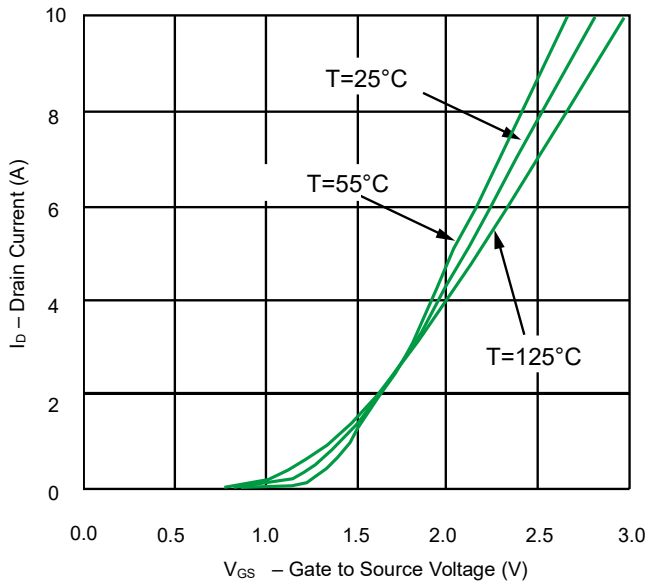


Fig 2. Transfer Characteristics

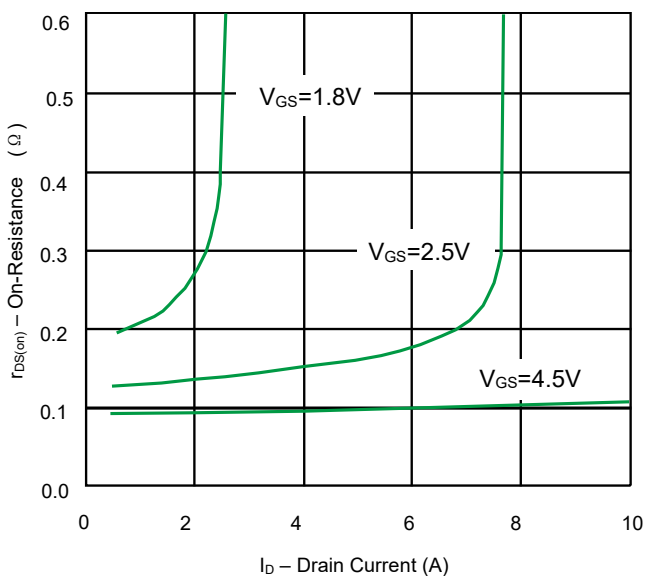


Fig 3. On-Resistance vs. Drain Current

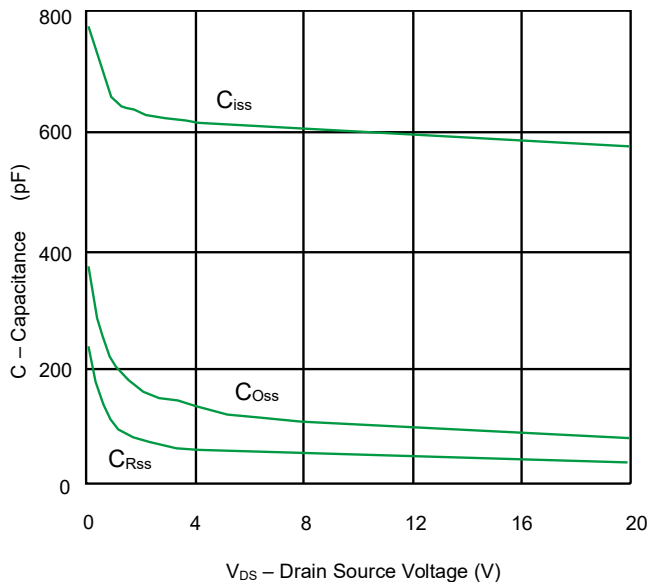
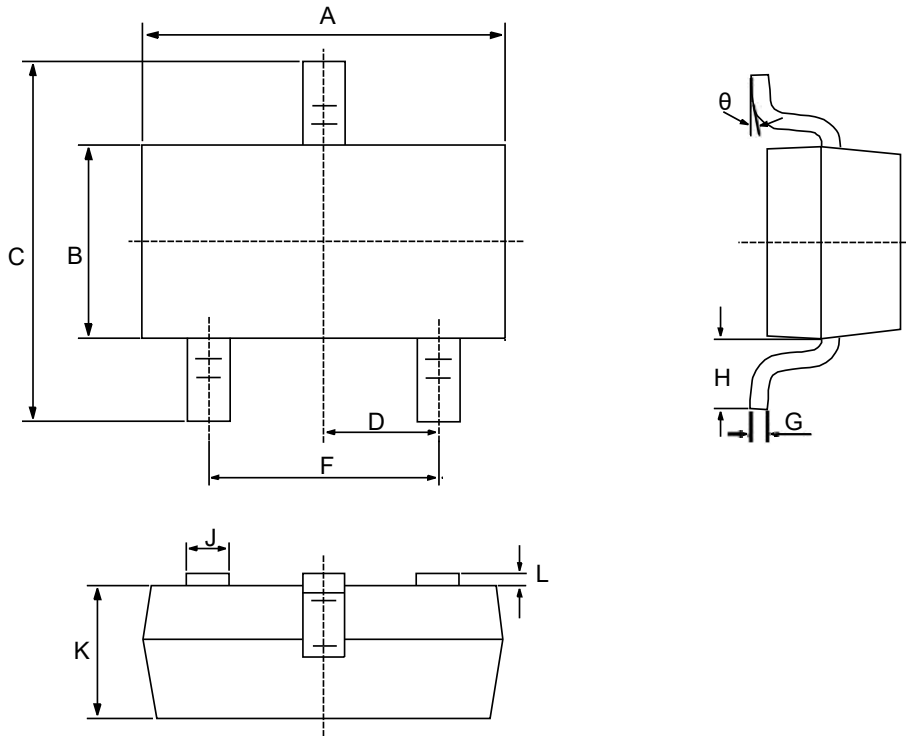
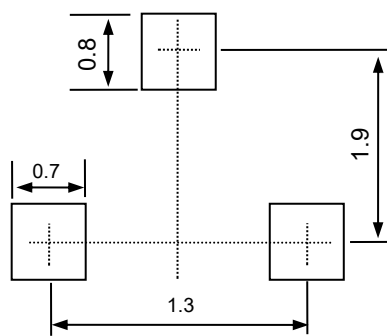


Fig 4. Capacitance

Product dimension (SOT-323)




Dim	Millimeters	
	MIN	MAX
A	1.80	2.20
B	1.15	1.35
C	2.00	2.45
D	0.65BSC	
F	1.20	1.40
G	0.05	0.25
H	0.525REF	
J	0.20	0.40
K	0.80	1.10
L	0.00	0.10
θ	0°	10°



Suggested PCB Layout


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