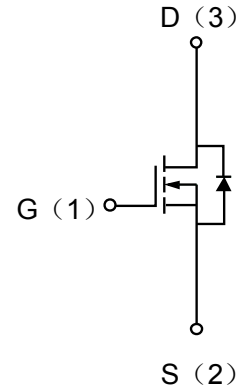


Description

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

MOSFET Product Summary		
$V_{DS}(V)$	$R_{DS(on)}(\Omega)$	$I_D(A)$
20	0.3@ $V_{GS}=4.5V$	0.6


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

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
OFF CHARACTERISTICS						
Drain-Source Breakdown Voltage	BV_{DSS}	$I_D=250\mu A, V_{GS}=0V$	20		-	V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=20V, V_{GS}=0V$	-	-	1	μA
Gate-Body Leakage Current	I_{GSS}	$V_{DS}=0V, V_{GS}=\pm 10V$	-	-	± 100	nA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}, I_D=250\mu A$	0.5		0.85	V
Static Drain-Source On-Resistance	$R_{DS(ON)}$	$V_{GS}=4.5V, I_D=0.6A$	-	0.3	0.35	Ω
		$V_{GS}=2.5V, I_D=0.5A$	-	0.5	0.55	Ω
		$V_{GS}=1.8V, I_D=0.35A$	-	0.6	0.85	Ω
DYNAMIC PARAMETERS						
Input Capacitance	C_{ISS}	$V_{GS}=0V, V_{DS}=16V,$ $f=1MHz$	-	135		pF
Output Capacitance	C_{DSS}		-	23		pF
Reverse Transfer Capacitance	C_{RSS}		-	18		pF
SWITCHING PARAMETERS						
Turn-On Delay Time	$t_{d(on)}$	$V_{DS}=10V, V_{GS}=4.5V,$ $R_G=10\Omega,$ $I_D=0.2A$	-		15	ns
Turn-Off Delay Time	$t_{d(off)}$		-		55	ns

Absolute maximum rating@25°C

Rating		Symbol	Value	Units
Drain-Source Voltage		V_{DS}	20	V
Gate-Source Voltage		V_{GS}	± 12	V
Drain Current	Continuous	I_D	0.6	A
	Pulsed	I_D	3.0	A
Total Power Dissipation	$T_A=25^\circ\text{C}$	P_D	170	mW
	$T_A=125^\circ\text{C}$	P_D	155	mW

Typical Characteristics

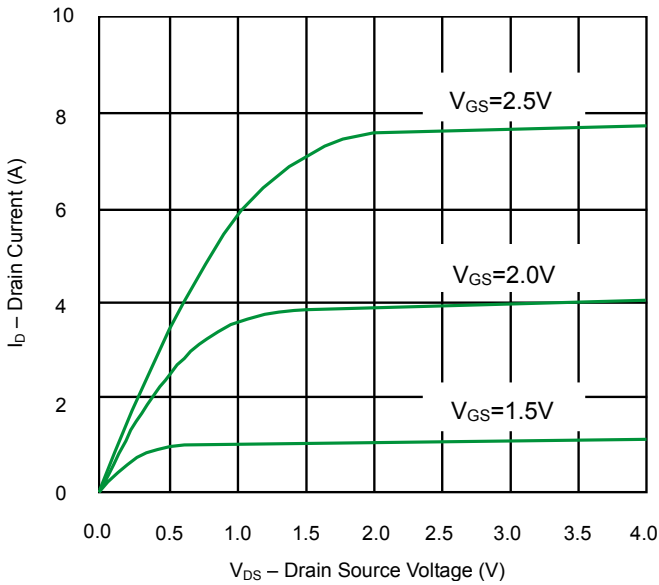


Fig 1. Output Characteristics

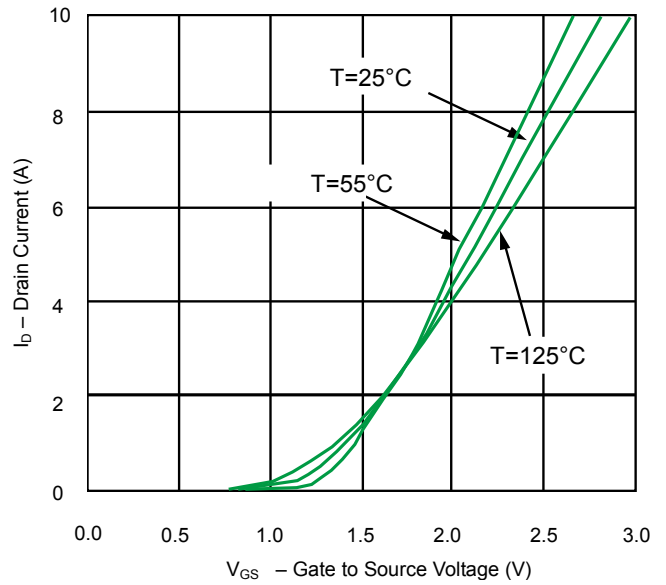


Fig 2. Transfer Characteristics

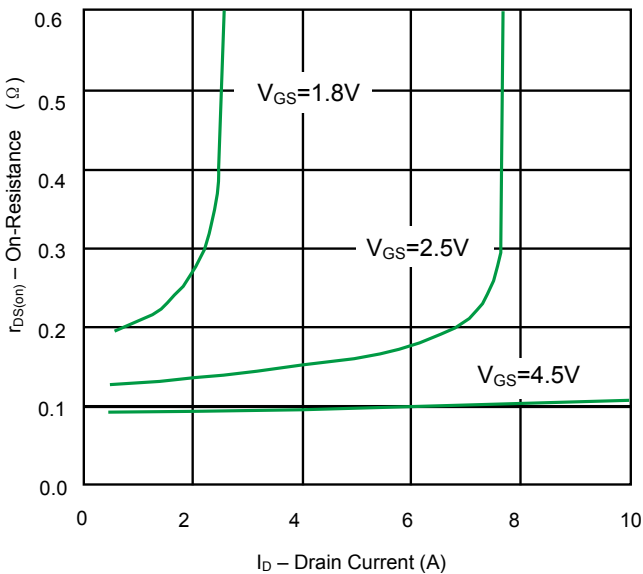


Fig 3. On-Resistance vs. Drain Current

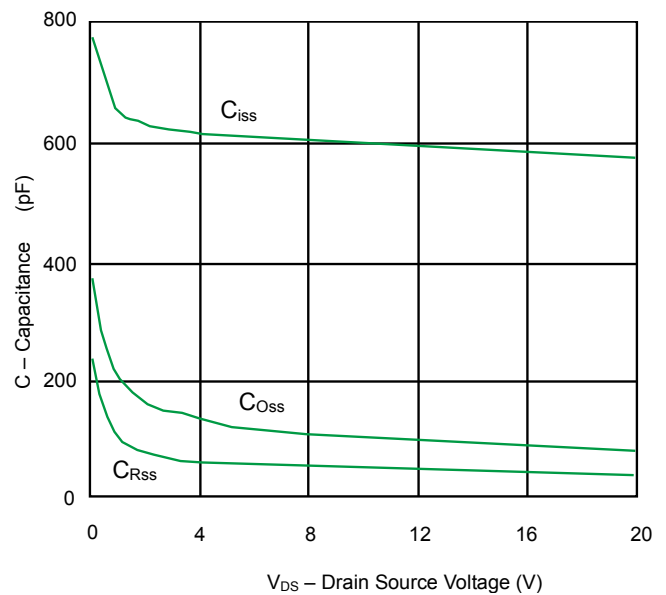
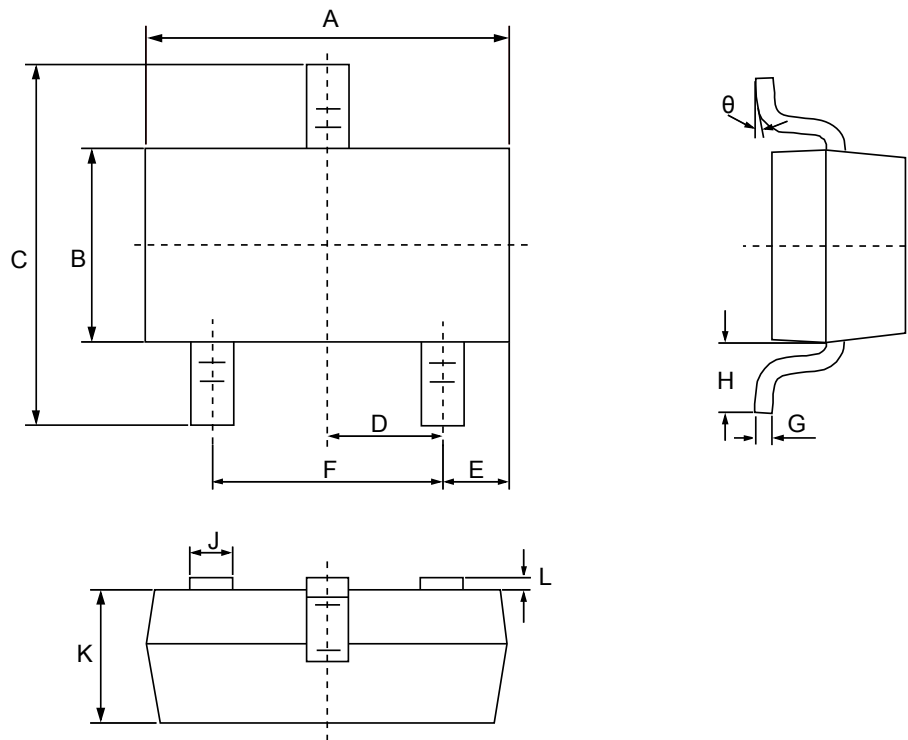



Fig 4. Capacitance

Product dimension (SOT-323)



Dim	Millimeters		Inches	
	MIN	MAX	MIN	MAX
A	1.80	2.20	0.071	0.087
B	1.15	1.35	0.045	0.053
C	2.00	2.40	0.079	0.095
D	0.65BSC		0.026BSC	
E	0.45	0.60	0.0177	0.0236
F	1.20	1.40	0.047	0.055
G	0.10	0.25	0.004	0.010
H	0.425REF		0.017REF	
J	0.30	0.40	0.012	0.016
K	0.7REF		0.028REF	
L	0.013	0.100	0.0005	0.0040
θ	0°	10°	0°	10°


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