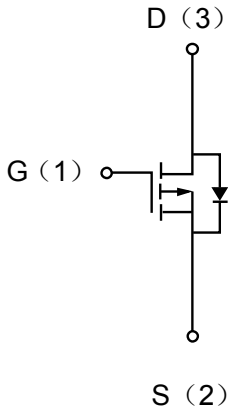
Description

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℃(unless otherwise specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
OFF CHARACTERISTICS						
Drain-Source Breakdown Voltage	BV_{DSS}	I_D=-250μA,V_{GS}=0V	-20	-	-	V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=-16V,V_{GS}=0V	-	-	-1	μA
Gate-Body Leakage Current	I_{GSS}	V_{DS}=0V,V_{GS}=±8V	-	-	±100	nA
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}=V_{GS}, I_D=-250μA	-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	gFS	V_{GS}=5V, I_D=50mA, T_A=125℃		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=6Ω, R_G=6Ω, I_D=-1A	-		12	ns
Turn-Off Delay Time	$t_{d(off)}$		-		35	ns

Absolute maximum rating@25℃

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℃	P_D	350	mW
	T_A=125℃	P_D	225	mW

Typical Characteristics

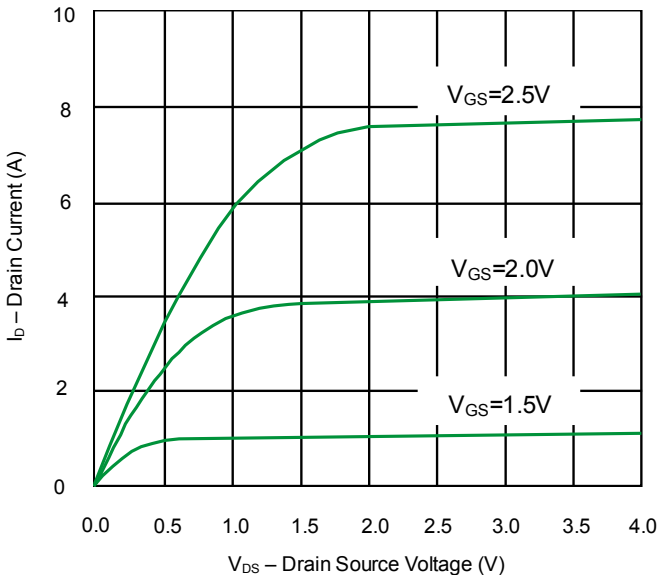


Fig 1. Output Characteristics

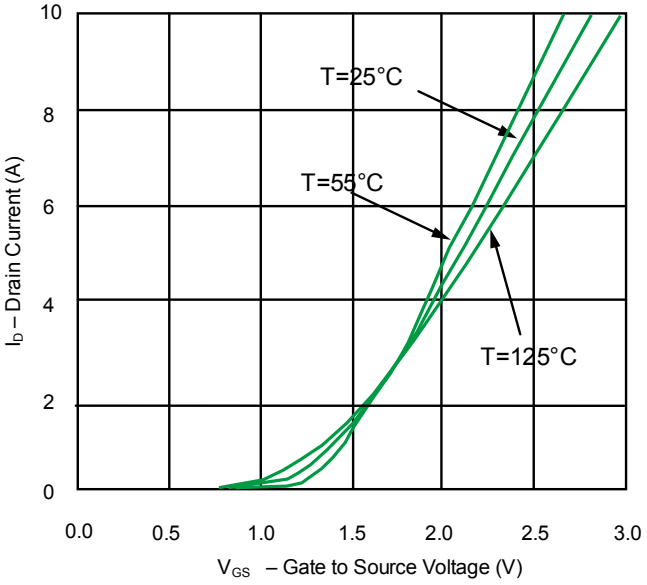


Fig 2. Transfer Characteristics

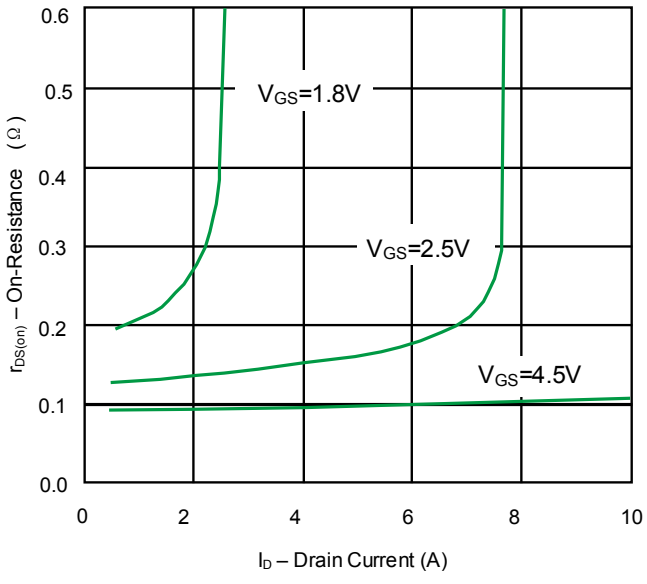


Fig 3. On-Resistance vs. Drain Current

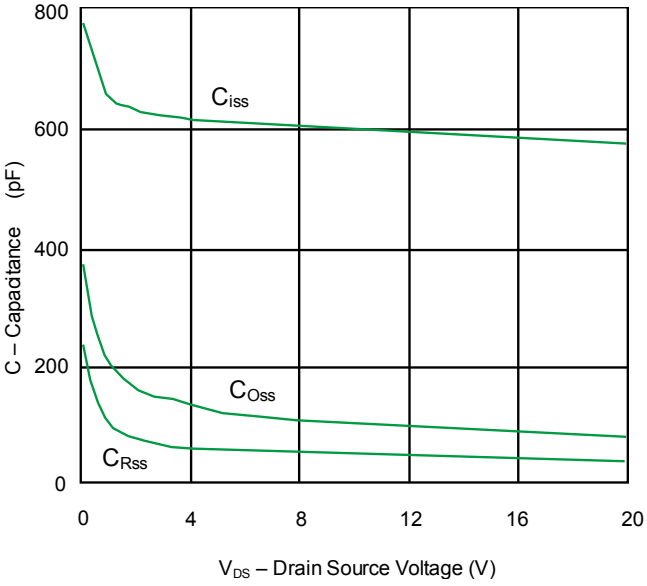
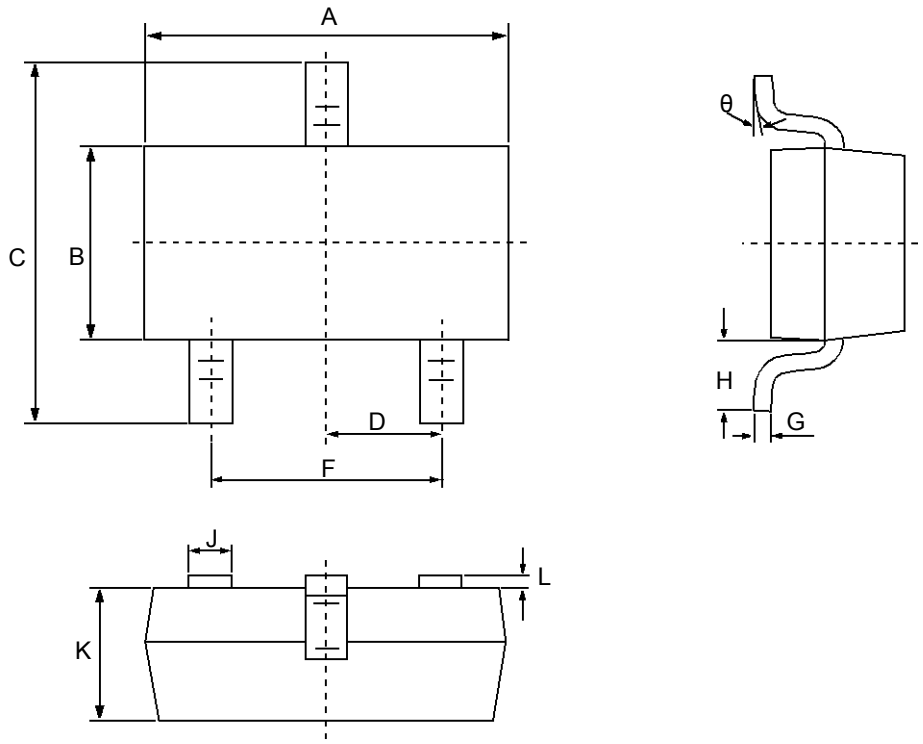
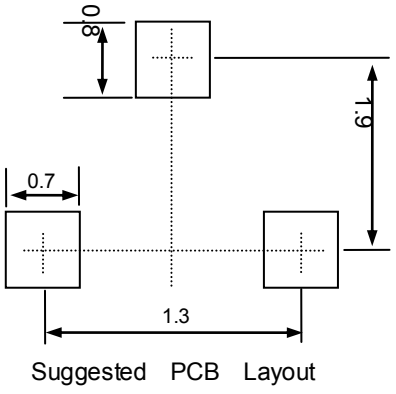


Fig 4. Capacitance

Product dimension （SOT-323）

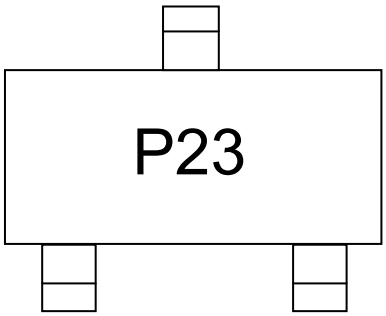


Dim	Millimeters	
	MIN	MAX
A	1.80	2.20
B	1.15	1.35
C	2.00	2.45
D	0.65BSC	
F	1.20	1.40
G	0.05	0.25
H	0.525REF	
J	0.20	0.40
K	0.80	1.10
L	0.00	0.10
θ	0°	10°



Suggested PCB Layout

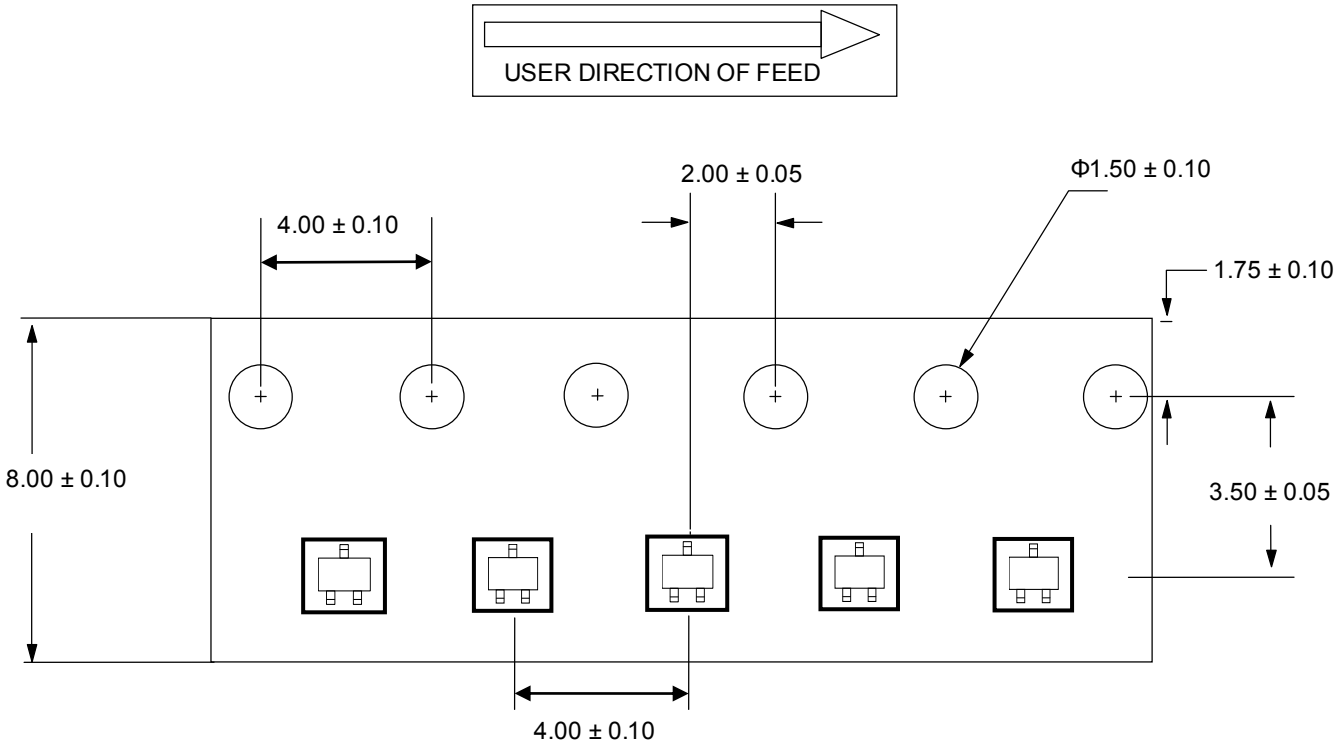
Marking information



Ordering information

Device	Package	Reel	MPQ
PPMUT20V3	SOT-323 (Pb-Free)	7”	3000 / Tape & Reel

Load with information



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