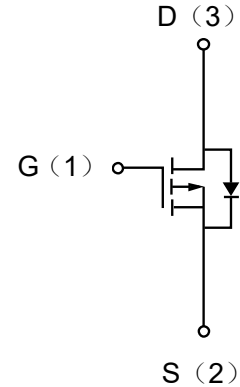


Description

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

MOSFET Product Summary		
$V_{DS}(V)$	$R_{DS(on)}(\Omega)(Typ)$	$I_D(A)$
-20	0.08 @ $V_{GS}=-4.5V$	-2.8
	0.11 @ $V_{GS}=-2.5V$	


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

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
OFF CHARACTERISTICS						
Drain-Source Breakdown Voltage	BV_{DSS}	$I_D = -250\mu A, V_{GS} = 0V$	-20	-	-	V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS} = -20V, V_{GS} = 0V$	-	-	-1	μA
Gate-Body Leakage Current	I_{GSS}	$V_{DS} = 0V, V_{GS} = \pm 8V$	-	-	± 100	nA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS} = V_{GS}, I_D = -250\mu A$	-0.45		-0.9	V
Static Drain-Source On-Resistance	$R_{DS(ON)}$	$V_{GS} = -4.5V, I_D = -2.8A$	-	0.08	0.11	Ω
		$V_{GS} = -2.5V, I_D = -2.0A$	-	0.11	0.15	Ω
Forward Tran conductance	g_{FS}	$V_{GS} = 5V, I_D = 50mA, T_A = 125^\circ C$		6.5		S
DYNAMIC PARAMETERS						
Input Capacitance	C_{ISS}	$V_{GS} = 0V, V_{DS} = 10V,$ $f = 1MHz$	-	360		pF
Output Capacitance	C_{DSS}		-	125		pF
Reverse Transfer Capacitance	C_{RSS}		-	50		pF
SWITCHING PARAMETERS						
Turn-On Delay Time	$t_{d(on)}$	$V_{DD} = -6V, V_{GS} = -4.5V,$ $R_L = 6\Omega, R_G = 6\Omega,$ $I_D = -1A$	-		17	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	-8	A
Total Power Dissipation	$T_A=25^\circ\text{C}$	P_D	900	mW
	$T_A=125^\circ\text{C}$	P_D	570	mW
Operating Junction and Storage Temperature Range		T_J, T_{STG}	-55 To 150	$^\circ\text{C}$

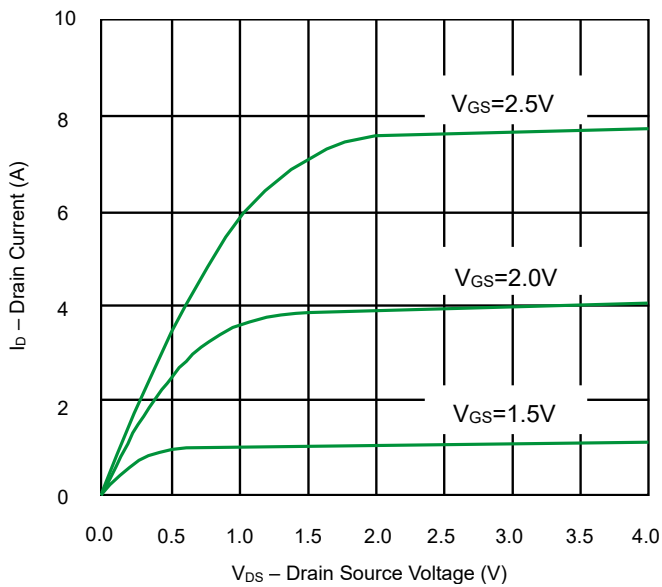
Typical Characteristics


Fig 1. Output Characteristics

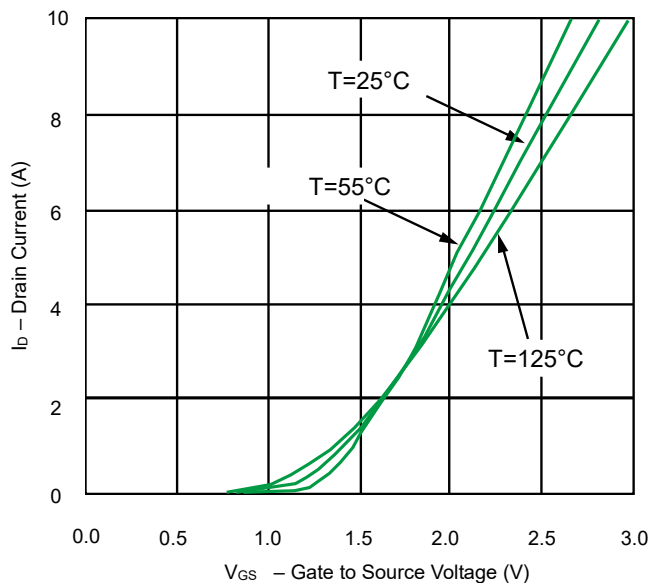


Fig 2. Transfer Characteristics

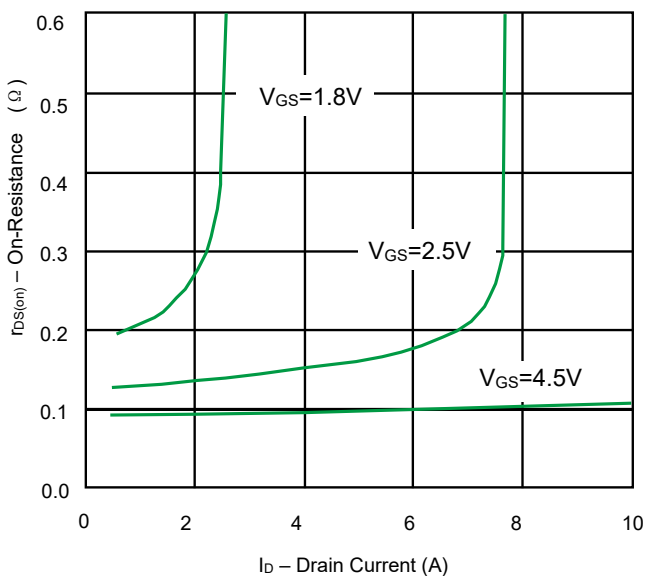


Fig 3. On-Resistance vs. Drain Current

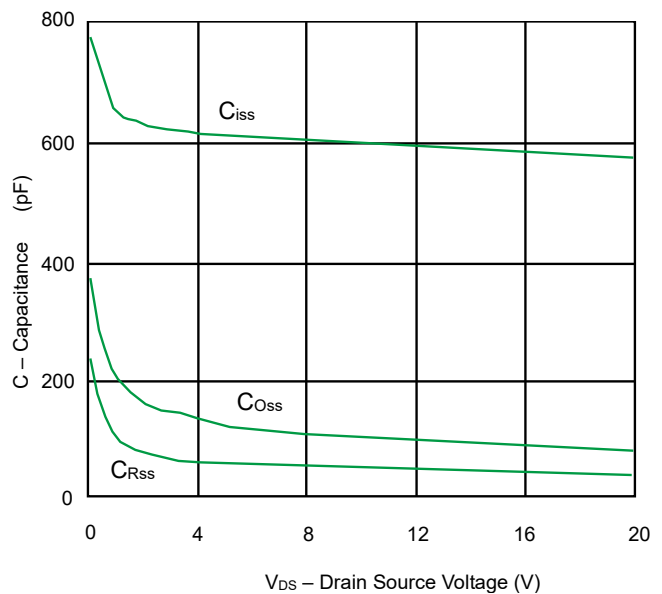
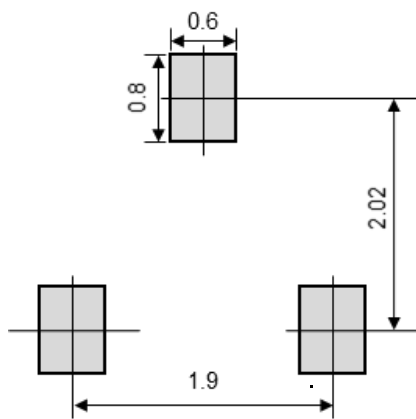
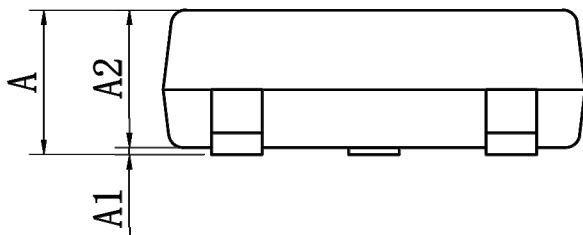
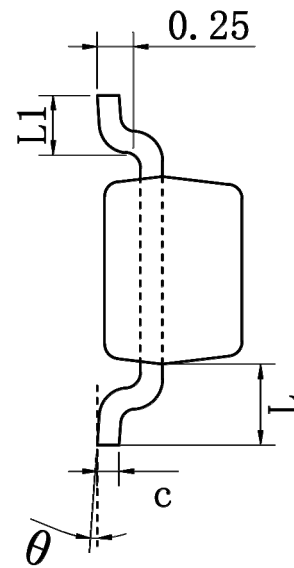
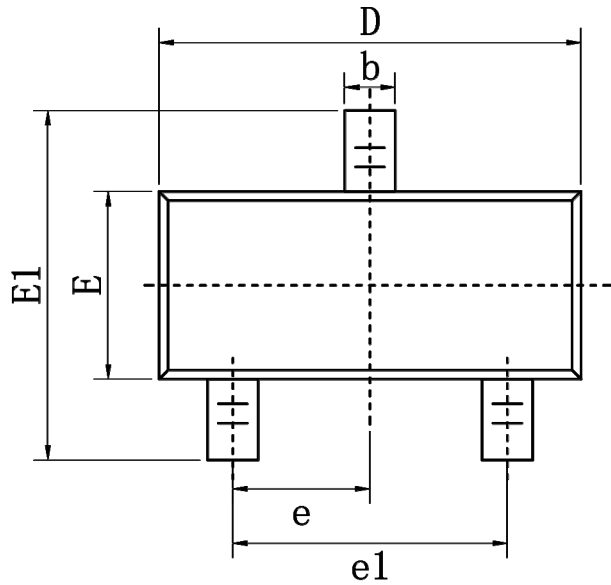


Fig 4. Capacitance

Product dimension(SOT-23)

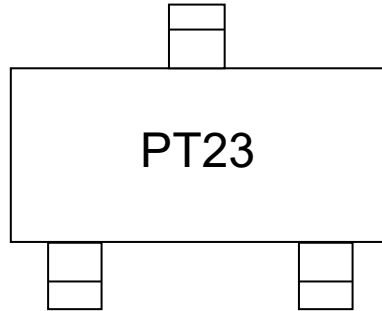


Unit:mm

Suggested PCB Layout

Dim	Millimeters		Inches	
	MIN	MAX	MIN	MAX
A	0.90	1.15	0.035	0.045
A1	0.00	0.10	0.000	0.004
A2	0.90	1.05	0.035	0.041
b	0.30	0.50	0.012	0.020
c	0.05	0.25	0.002	0.010
D	2.80	3.00	0.110	0.118
E	1.20	1.40	0.047	0.055
E1	2.25	2.55	0.089	0.100
e	0.95 Typ.		0.037 Typ.	
e1	1.90 Typ.		0.075 Typ.	
L	0.55 Ref.		0.022 Ref.	
L1	0.30	0.50	0.012	0.020
θ	0°	8°	0°	8°

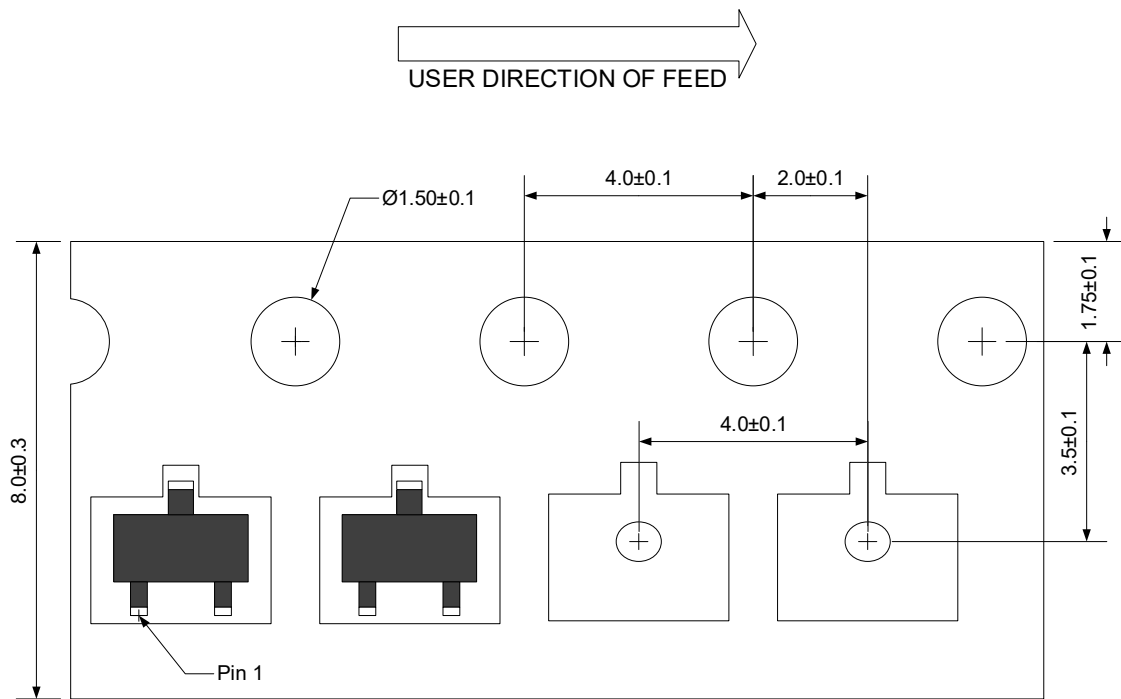
Marking information



Ordering information


Device	Package	Reel	Shipping
PPMT20V3	SOT-23	7"	3000 / Tape & Reel

Load With Information



Unit:mm


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