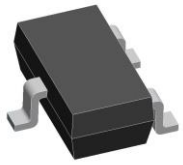
Description

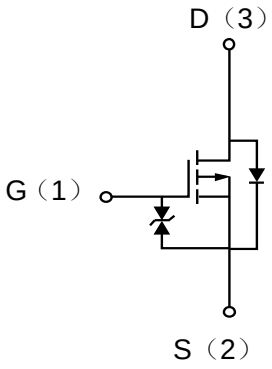
The enhancement mode MOS is extremely high density cell and low on-resistance.

Device meets MSL 1 requirements.

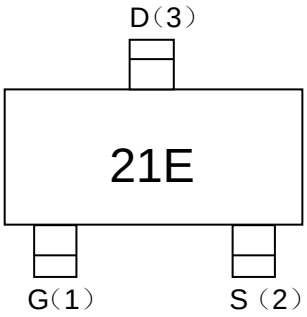
MOSFET Product Summary		
V_{DS}(V)	$R_{DS(on)}$(Ω)	I_D(A)
-20	0.85@ V_{GS}=-4.5V	-0.8
	1.2@ V_{GS}=-2.5V	-0.5



SOT-523 (Top View)



Circuit Diagram



Marking (Top View)

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}=20V,V_{GS}=0V	-	-	-1	μA
Gate-Body Leakage Current	I_{GSS}	V_{DS}=0V,V_{GS}=±10V	-	-	±1	uA
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}=V_{GS}, I_D=-250μA	-0.35		-1	V
Static Drain-Source On-Resistance	$R_{DS(ON)}$	V_{GS}=-4.5V, I_D=-0.8A	-	-	0.85	Ω
		V_{GS}=-2.5V, I_D=-0.5A	-	-	1.2	Ω
Forward Tran conductance	g_{FS}	V_{GS}=5V, I_D=50mA, T_A=125℃		6.5		S
DYNAMIC PARAMETERS						
Input Capacitance	C_{ISS}	V_{GS}=0V, V_{DS}=-6V, f=200KMHz	-	200		pF
Output Capacitance	C_{DSS}		-	80		pF
Reverse Transfer Capacitance	C_{RSS}		-	150		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	-		17	ns
Turn-Off Delay Time	$t_{d(off)}$		-		65	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	-0.8	A
	Pulsed	I_D	-3	A
Total Power Dissipation	T_A=25℃	P_D	250	mW
	T_A=125℃	P_D	200	mW

Typical Characteristics

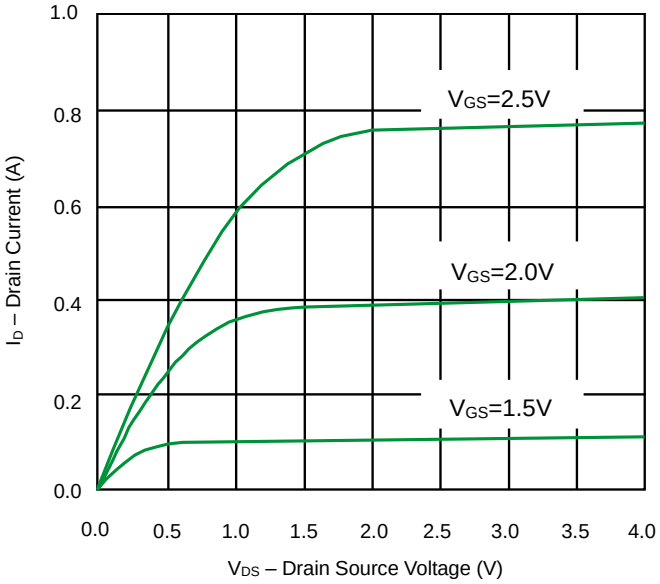


Fig 1. Output Characteristics

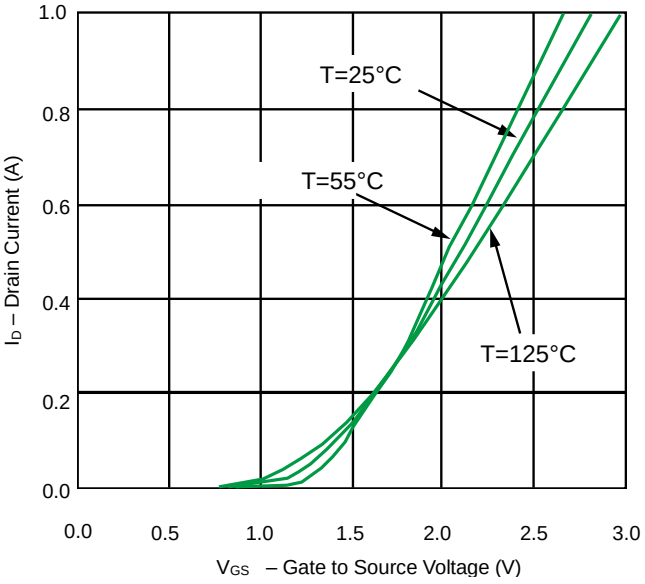


Fig 2. Transfer Characteristics

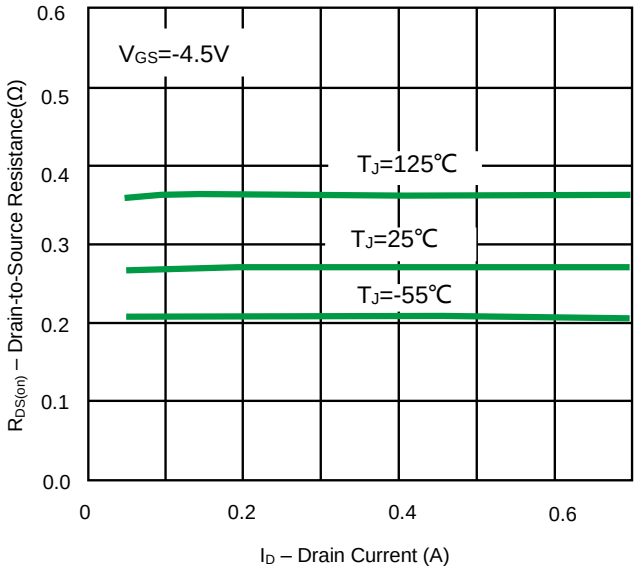


Fig 3. On-Resistance vs. Drain Current

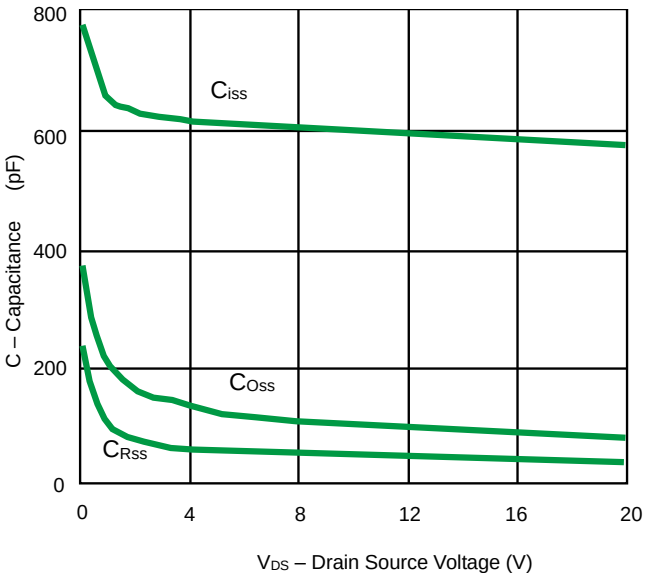
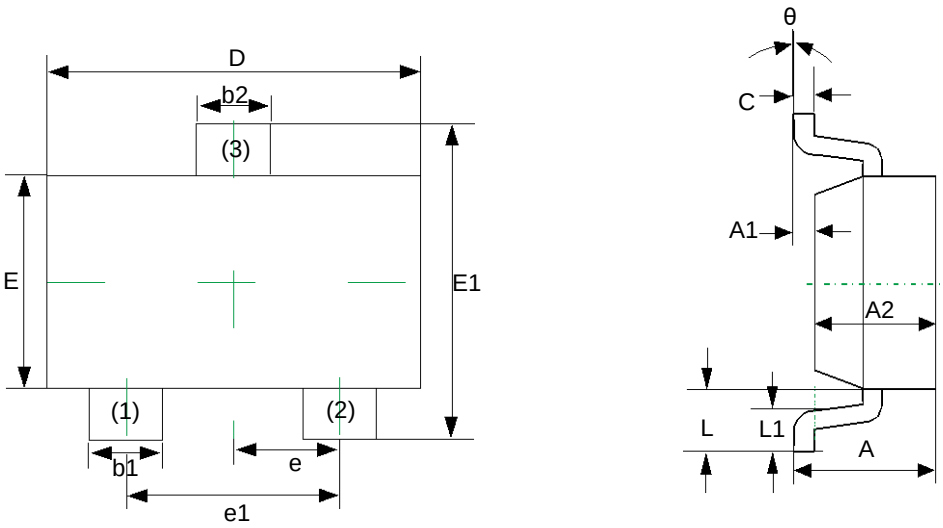


Fig 4. Capacitance

Product dimension（SOT-523）

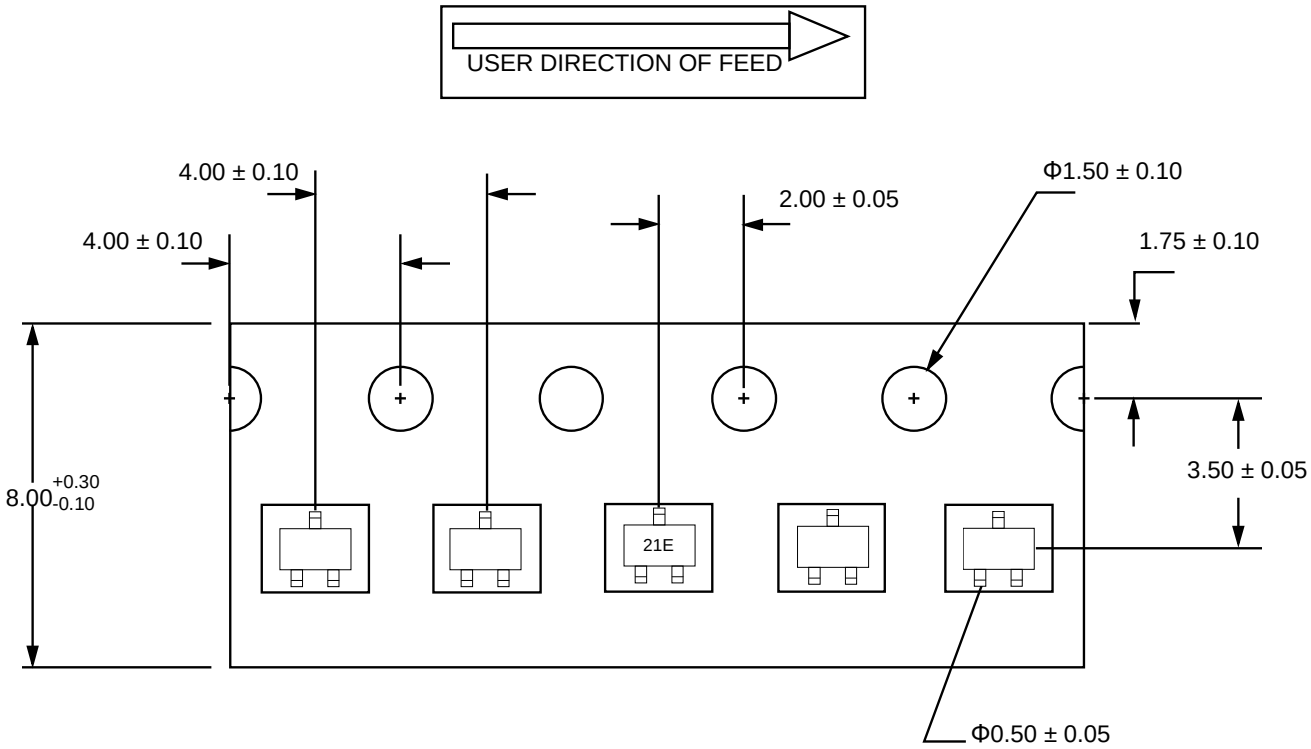


Dim	Millimeters		Inches	
	MIN	MAX	MIN	MAX
A	0.700	0.900	0.028	0.035
A1	0.000	0.100	0.000	0.004
A2	0.700	0.800	0.028	0.031
b1	0.150	0.250	0.006	0.010
b2	0.250	0.350	0.010	0.014
c	0.100	0.200	0.004	0.008
D	1.500	1.700	0.059	0.067
E	0.700	0.900	0.028	0.035
E1	1.450	1.750	0.057	0.069
e	0.500TYP		0.020TYP	
e1	0.900	1.100	0.035	0.043
L	0.400REF		0.016REF	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°

Ordering information

Device	Package	Reel	Shipping
PPMET20V08E	SOT-523 (Pb-Free)	7"	3000 / Tape & Reel

Load with information



Unit：mm

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