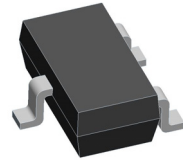
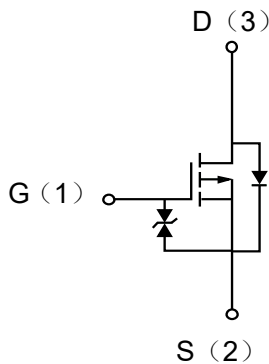
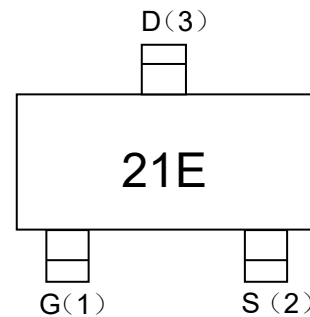


Description

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°C (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} = ±4.5V	-	-	±10	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°C		6.5		S
DYNAMIC PARAMETERS						
Input Capacitance	C _{ISS}	V _{GS} = 0V, V _{DS} = -6V, f = 200KHz	-	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°C

Rating		Symbol	Value	Units
Drain-Source Voltage		V_{DS}	-20	V
Gate-Source Voltage		V_{GS}	± 6	V
Drain Current	Continuous	I_D	-0.8	A
	Pulsed	I_D	-3	A
Total Power Dissipation	$T_A=25^\circ\text{C}$	P_D	250	mW
	$T_A=125^\circ\text{C}$	P_D	200	mW

Typical Characteristics

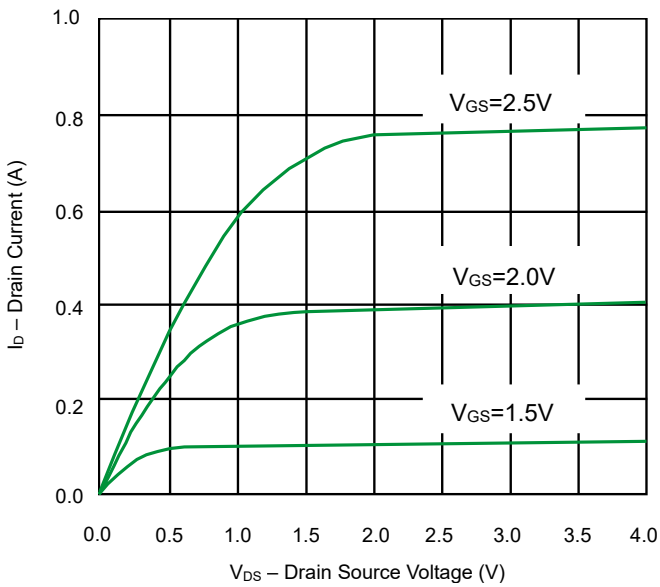


Fig 1. Output Characteristics

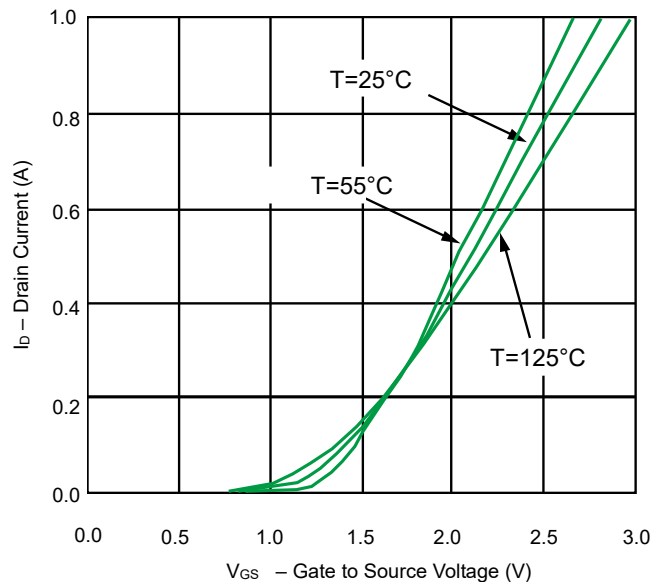


Fig 2. Transfer Characteristics

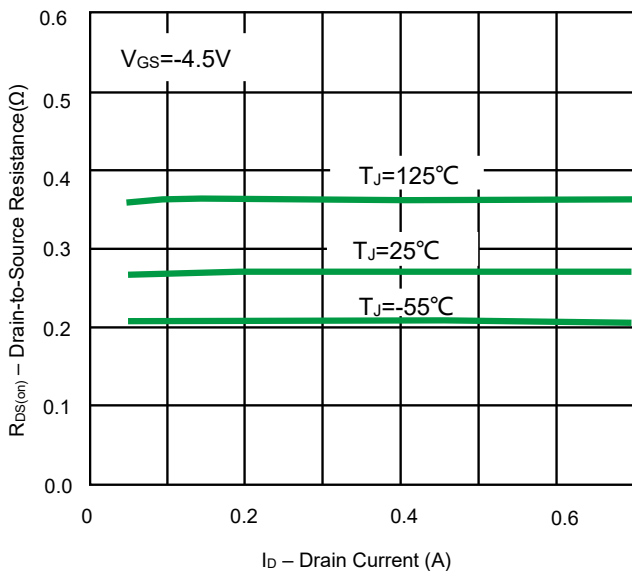


Fig 3. On-Resistance vs. Drain Current

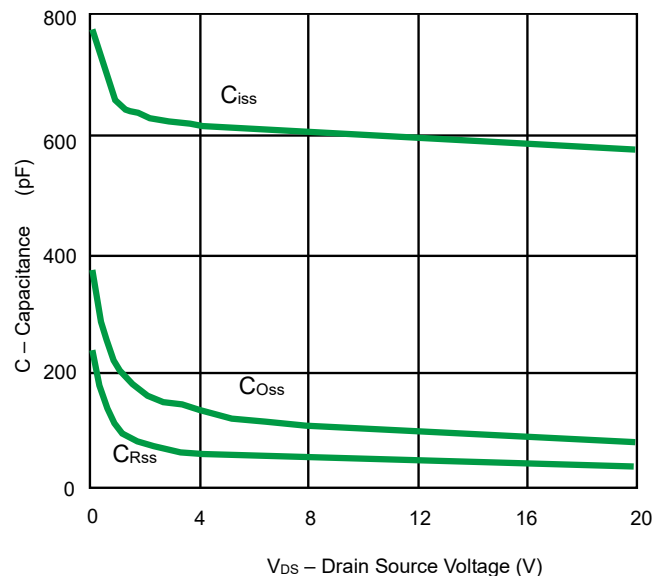
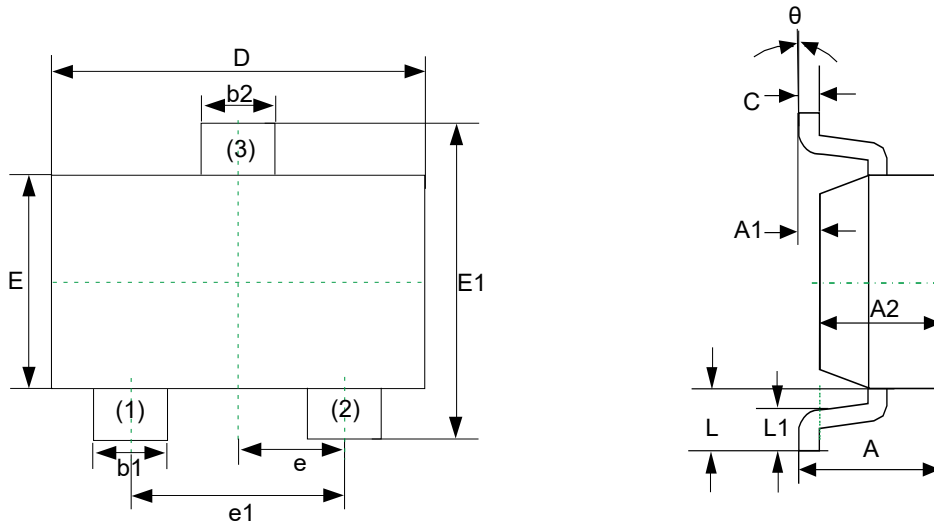


Fig 4. Capacitance

Product dimension (SOT-523)

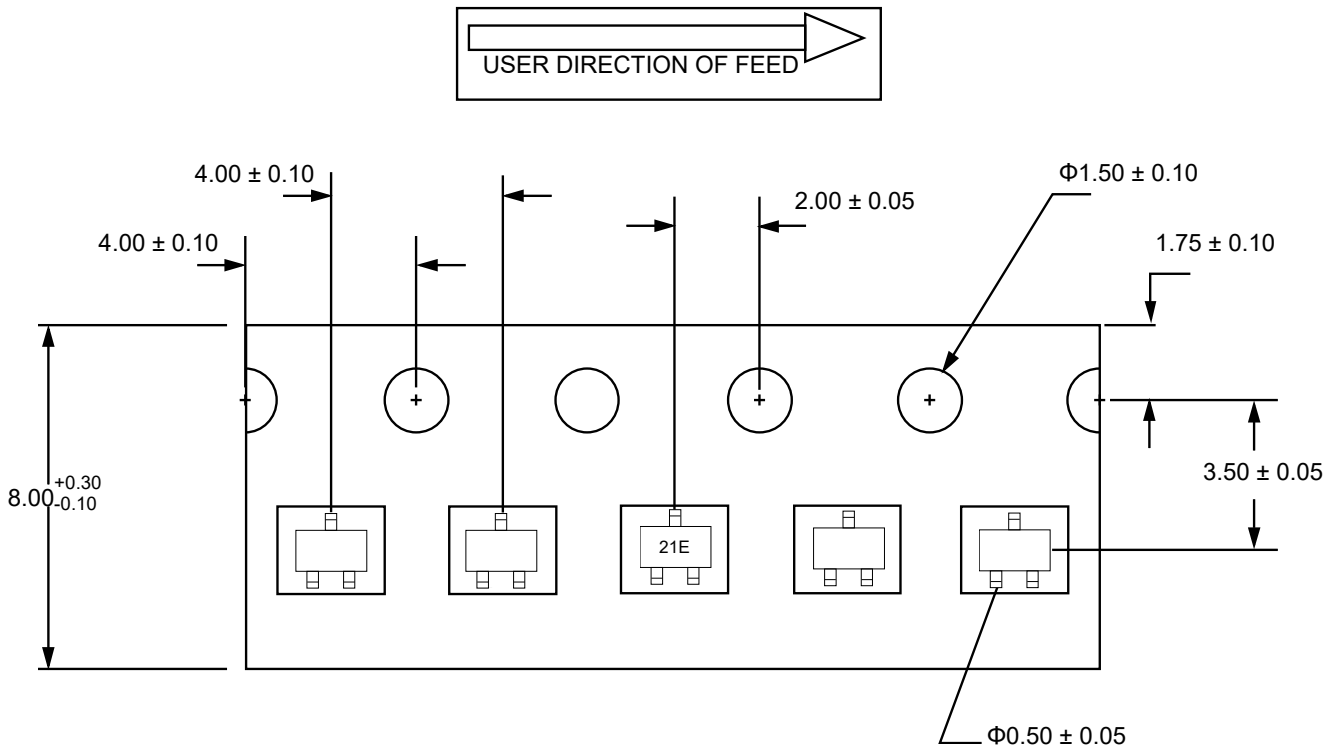


Dim	Millimeters		Inches	
	MIN	MAX	MIN	MAX
A	0.700	0.900	0.028	0.035
A1	0.000	0.100	0.000	0.004
A2	0.700	0.800	0.028	0.031
b1	0.150	0.250	0.006	0.010
b2	0.250	0.350	0.010	0.014
c	0.100	0.200	0.004	0.008
D	1.500	1.700	0.059	0.067
E	0.700	0.900	0.028	0.035
E1	1.450	1.750	0.057	0.069
e	0.500TYP		0.020TYP	
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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