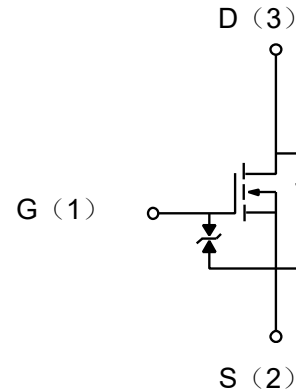


Description

PNM723T703E0-2 is designed for high speed switching applications
 The enhancement mode MOS is extremely high density cell and low on-resistance.

MOSFET Product Summary			
V _{DS} (V)	R _{DS(on)} (Ω)	V _{GS(th)} (V)	I _D (A)
40	7.5@ V _{GS} =10V	0.5 to 1.5	0.18



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

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
OFF CHARACTERISTICS						
Drain-Source Breakdown Voltage	V _{DSS}	I _D =10μA, V _{GS} =0V	40	-	-	V
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} =40V, V _{GS} =0V	-	-	0.5	μA
Gate-Body Leakage Current	I _{GSS}	V _{DS} =0V, V _{GS} =±20V	-	-	±10	μA
Gate Threshold Voltage	V _{GS(th)}	V _{DS} =V _{GS} , I _D =250μA	0.5	-	1.5	V
Static Drain-Source On-Resistance	R _{DS(ON)}	V _{GS} =5V, I _D =0.05A	-	-	7.5	Ω
		V _{GS} =10V, I _D =0.5A	-	-	7.5	Ω
Diode Forward Voltage	V _{SD}		-	0.72	1	V
Maximum Body-Diode Continuous Current	I _S		-	-	0.2	A
DYNAMIC PARAMETERS						
Input Capacitance	C _{ISS}	V _{GS} =0V, V _{DS} =25V, f=1MHz	-	-	40	pF
Output Capacitance	C _{DSS}		-	-	20	pF
Reverse Transfer Capacitance	C _{RSS}		-	-	5	pF
Total Gate Charge	Q _g	I _D =0.2A, V _{DS} =6V, V _{GS} =4.5V	-	0.23	-	nC
Gate-to-Source Charge	Q _{gs}		-	0.05	-	
Gate-to-Drain(Miller) Charge	Q _{gd}		-	0.06	-	

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

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
SWITCHING PARAMETERS						
Turn-On Delay Time	$t_{d(on)}$	$V_{DS}=30V, V_{GS}=10V,$ $R_G=25\Omega, R_L=150\Omega$ $I_D=0.2A$	-	-	20	ns
Turn-Off Delay Time	$t_{d(off)}$		-	-	20	ns
Reverse recovery time	t_{rr}	$I_F=0.2A, dI/dt=100A/\mu s$		11.3		nS
Reverse recovery charge	Q_{rr}			7.5		nC
Reverse recovery current	I_{rrm}			0.66		A

Absolute maximum rating@25°C

Rating		Symbol	Value	Units
Drain-Source Voltage		V_{DS}	40	V
Gate-Source Voltage		V_{GS}	± 20	V
Drain Current	Continuous	I_D	0.18	A
	Pulsed	I_D	0.36	A
Total Power Dissipation	$T_A=25^\circ C$	P_D	150	mW
Junction and Storage Temperature Range		T_J, T_{STG}	-55~+150	$^\circ C$

Typical Characteristics

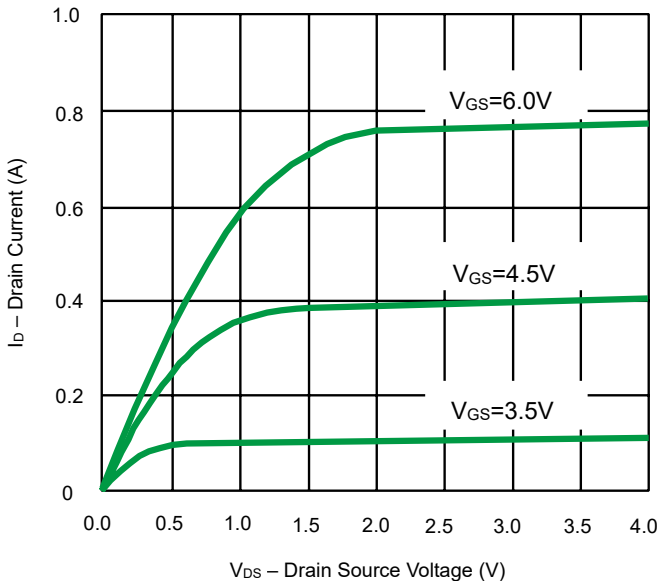


Fig 1. Output Characteristics

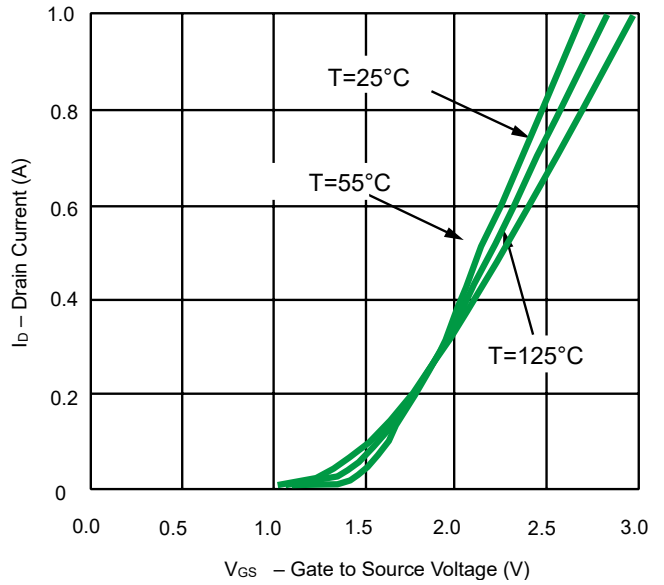


Fig 2. Transfer Characteristics

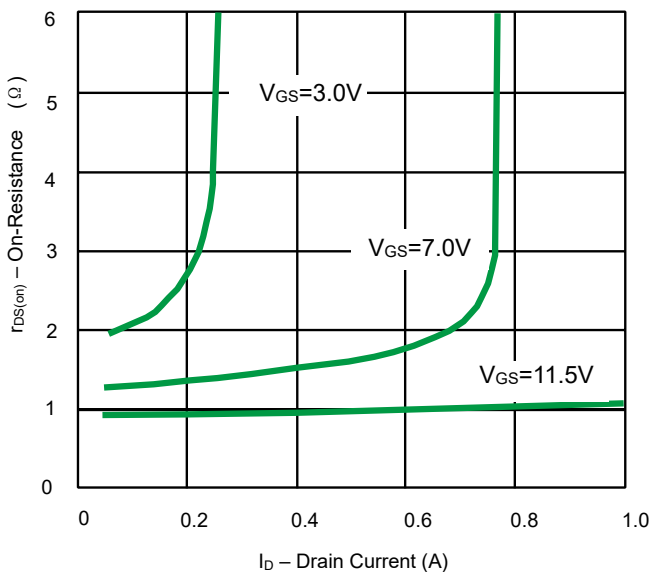


Fig 3. On-Resistance vs. Drain Current

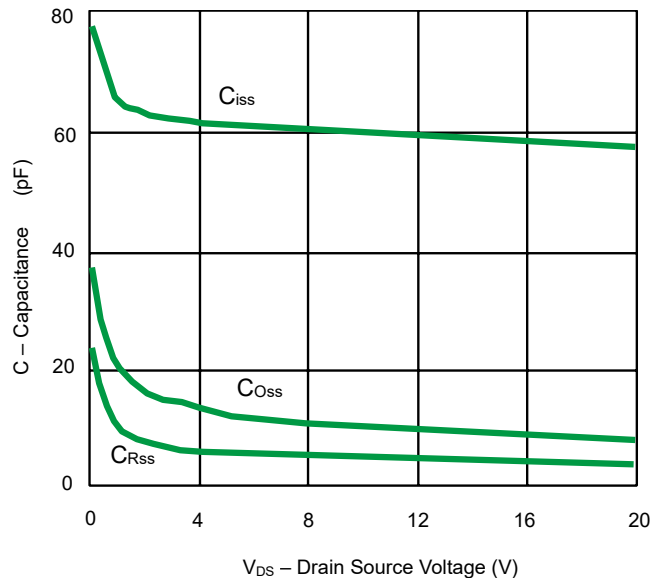
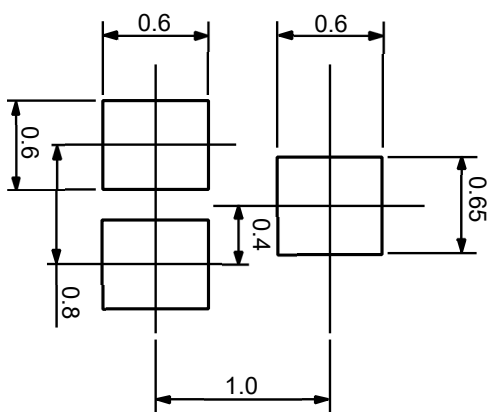
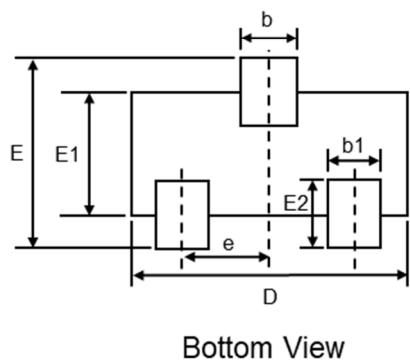
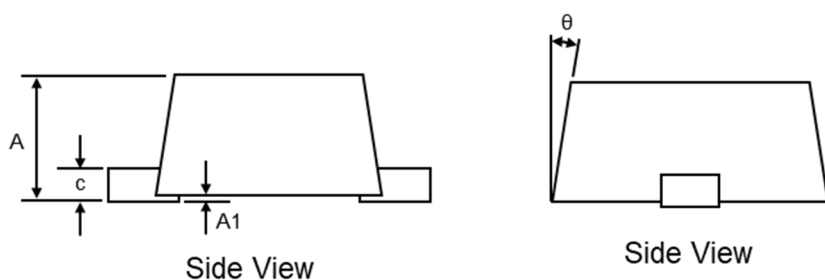


Fig 4. Capacitance

Product dimension (SOT-723)

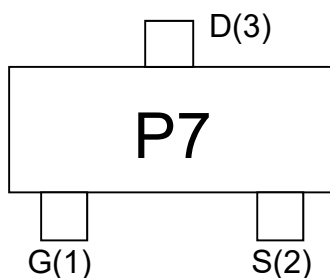


Dim	Millimeters		Inches	
	Min	Max	Min	Max
A	0.40	0.55	0.016	0.022
A1	0.00	0.05	0.000	0.002
b	0.20	0.37	0.008	0.015
b1	0.15	0.27	0.006	0.011
c	0.06	0.18	0.002	0.007
D	1.10	1.30	0.043	0.051
E	1.10	1.30	0.043	0.051
E1	0.70	0.90	0.028	0.035
E2	0.20	0.30	0.008	0.012
e	0.40 Ref.		0.016 Ref.	
θ	5°	9°	5°	9°

Unit: mm

Suggested PCB Layout

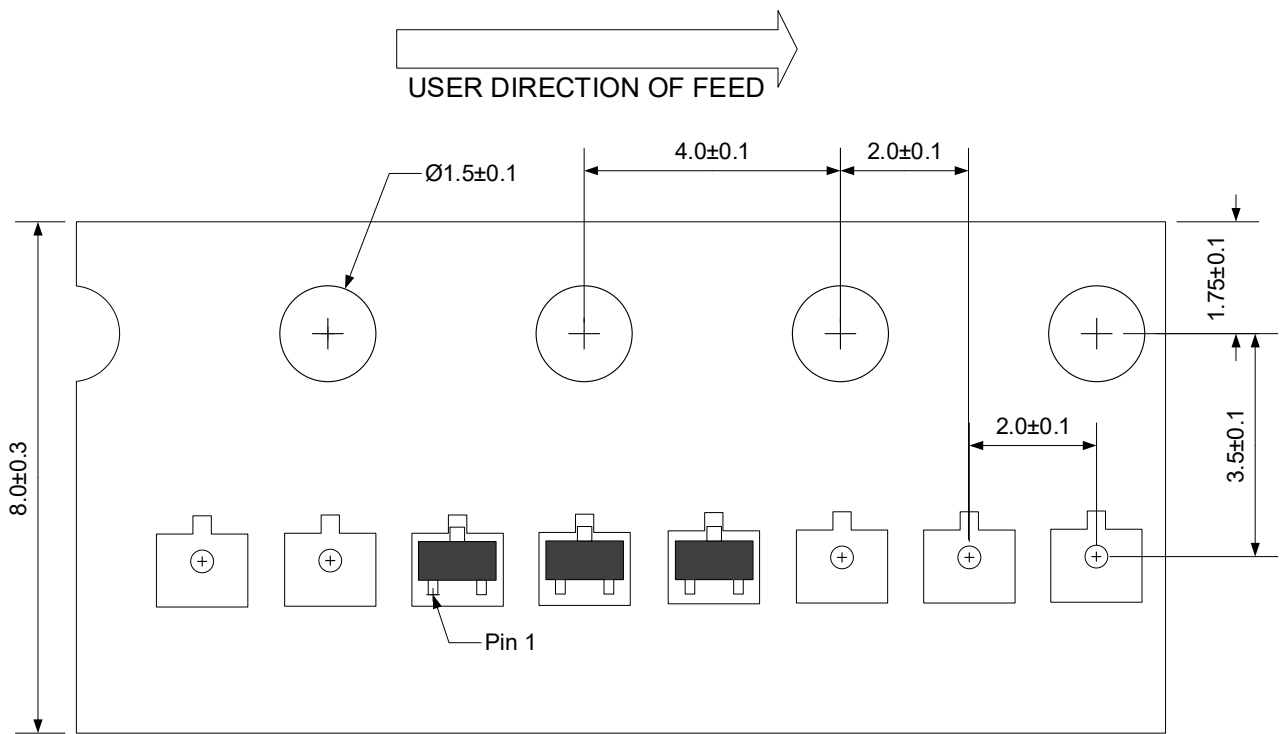
Marking information



Ordering information


Device	Package	Reel	Shipping
PNM723T703E0-2	SOT-723 (Pb-Free)	7"	10000 / Tape & Reel

Load with information



Unit:mm


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