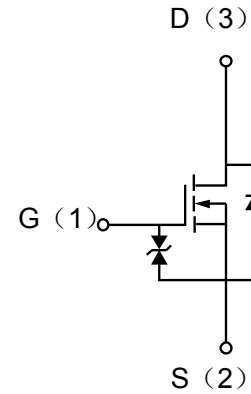


**Description**

PNM523T703E0-2 is designed for high speed switching applications

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

MOSFET Product Summary			
$V_{DS}(V)$	$R_{DS(on)}(\Omega)$	$V_{GS(th)}(V)$	$I_D(A)$
40	2.0@ $V_{GS}=10V$	0.5 to 1.3	0.18


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

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
<b>OFF CHARACTERISTICS</b>						
Drain-Source Breakdown Voltage	$V_{DSS}$	$I_D = 10\mu A, V_{GS} = 0V$	40	-	-	V
Zero Gate Voltage Drain Current	$I_{DSS}$	$V_{DS} = 40V, V_{GS} = 0V$	-	-	0.5	$\mu A$
Gate-Body Leakage Current	$I_{GSS}$	$V_{DS} = 0V, V_{GS} = \pm 20V$	-	-	$\pm 1$	$\mu A$
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS} = V_{GS}, I_D = 250\mu A$	0.5	-	1.3	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS} = 5V, I_D = 0.05A$	-	-	3.5	$\Omega$
		$V_{GS} = 10V, I_D = 0.5A$	-	-	2.0	$\Omega$
<b>DYNAMIC PARAMETERS</b>						
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
<b>SWITCHING PARAMETERS</b>						
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

Absolute maximum rating @25°C

Rating		Symbol	Value	Units
Drain-Source Voltage		$V_{DS}$	40	V
Gate-Source Voltage		$V_{GS}$	$\pm 20$	V
Drain Current	Continuous	$I_D$	0.18	A
	Pulsed	$I_D$	0.36	A
Total Power Dissipation		$P_D$	150	mW

Typical Characteristics

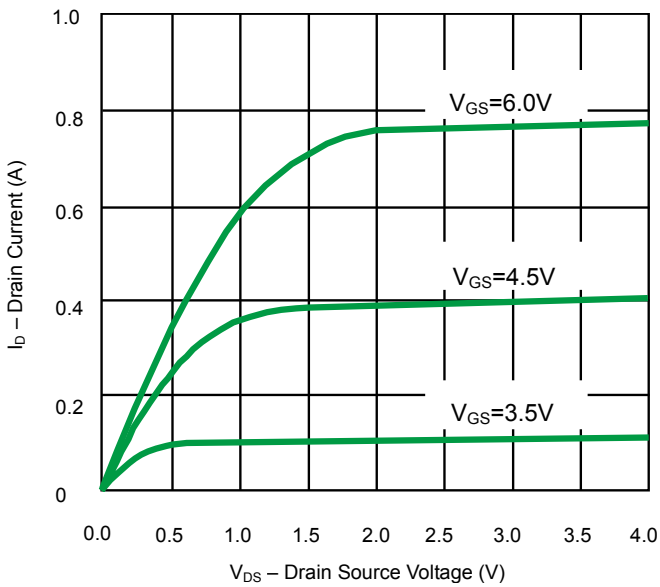


Fig 1. Output Characteristics

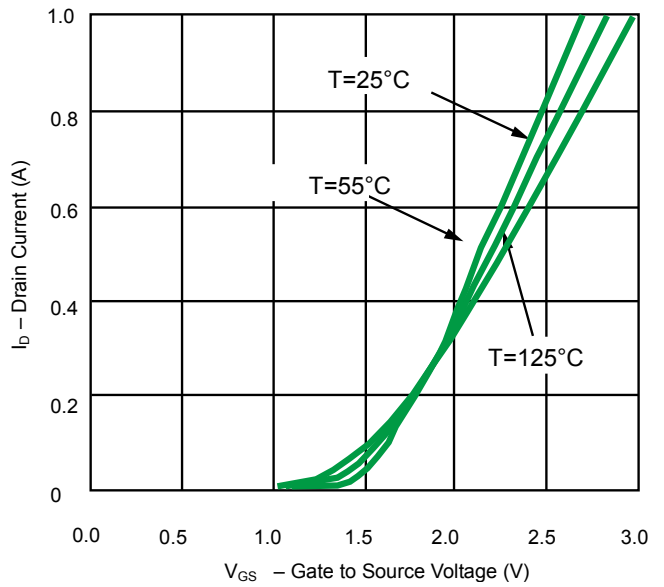


Fig 2. Transfer Characteristics

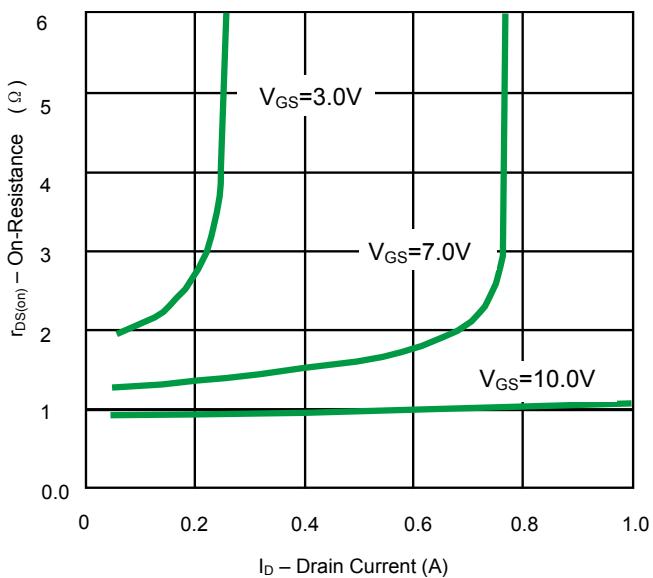


Fig 3. On-Resistance vs. Drain Current

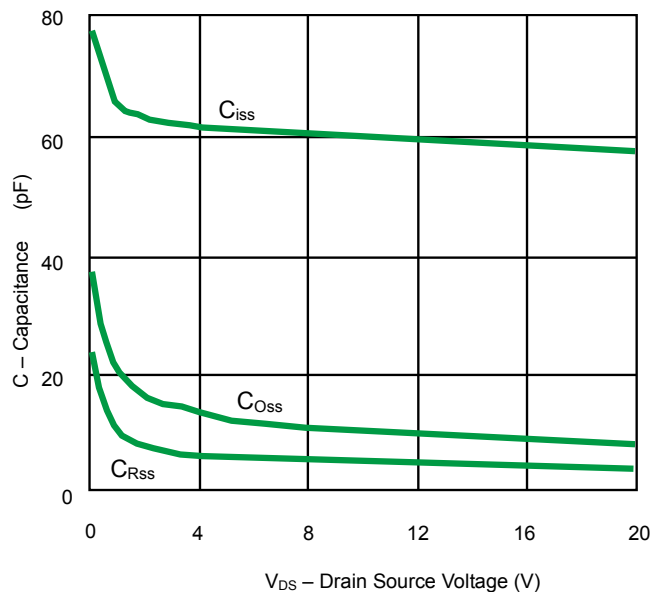
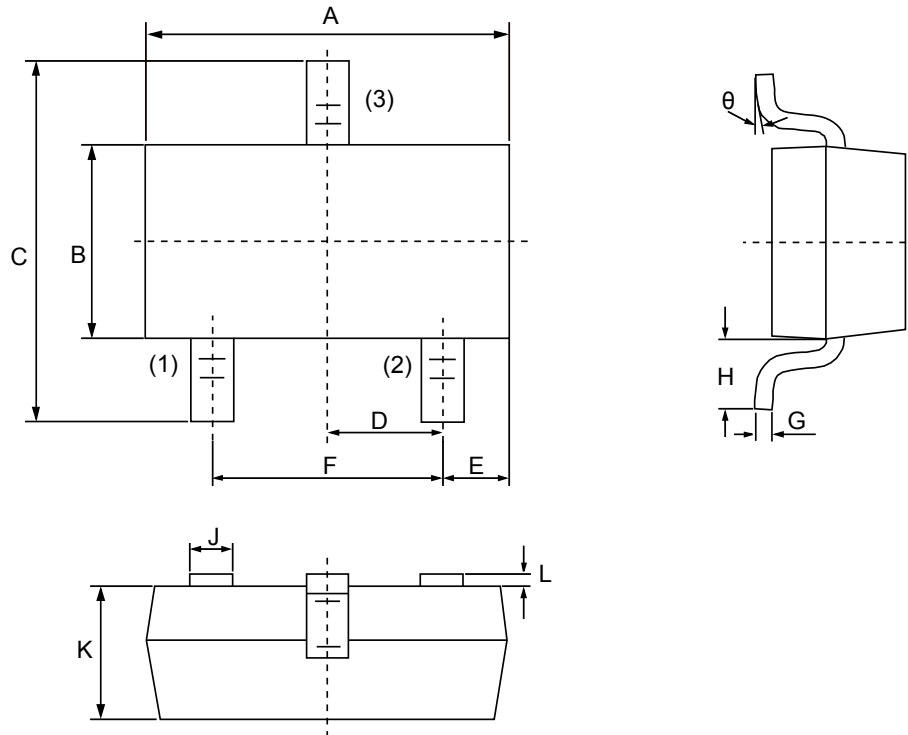


Fig 4. Capacitance

Product dimension (SOT-523)




Dim	Millimeters		Inches	
	MIN	MAX	MIN	MAX
A	1.50	1.70	0.059	0.067
B	0.75	0.85	0.030	0.033
C	1.450	1.750	0.057	0.069
D	0.50BSC		0.020BSC	
E	0.30	0.33	0.012	0.015
F	0.900	1.100	0.035	0.043
G	0.100	0.200	0.004	0.008
H	0.550		0.022	
J	0.150	0.250	0.006	0.010
K	0.700	0.900	0.028	0.038
L	0.024	0.027	0.600	0.700
θ	0°	4°	0°	4°

Ordering information

Device	Package	Shipping
PNM523T703E0-2	SOT-523 (Pb-Free)	3000 / Tape & Reel


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