



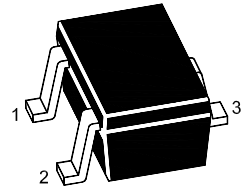
PJM7002KNSI

N-Channel Enhancement Mode Power MOSFET

Features

- High density cell design for low $R_{DS(on)}$
- Voltage controlled small signal switching
- High saturation current capability
- ESD protected(HBM) up to 2.5KV
- $V_{DS} = 60V, I_D = 0.34A$
 $R_{DS(on)} < 5\Omega @ V_{GS} = 10V$

SOT-323



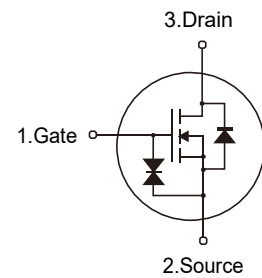
1. Gate 2. Source 3. Drain

Marking Code: 72K

Applications

- DC/DC Converter
- Load Switch for Portable Devices

Schematic Diagram



Absolute Maximum Ratings

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	Value	Unit
Drain-Source Voltage	V_{DS}	60	V
Gate-Source Voltage	V_{GS}	± 20	V
Drain Current-Continuous	I_D	0.34	A
Drain Current-Pulsed ^{Note1}	I_{DM}	0.8	A
Maximum Power Dissipation	P_D	0.2	W
Junction Temperature	T_J	150	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C

Thermal Characteristics

Thermal Resistance, Junction-to-Ambient ^{Note2}	$R_{\theta JA}$	625	°C/W
--	-----------------	-----	------



PJM7002KNSI

N-Channel Enhancement Mode Power MOSFET

Electrical Characteristics

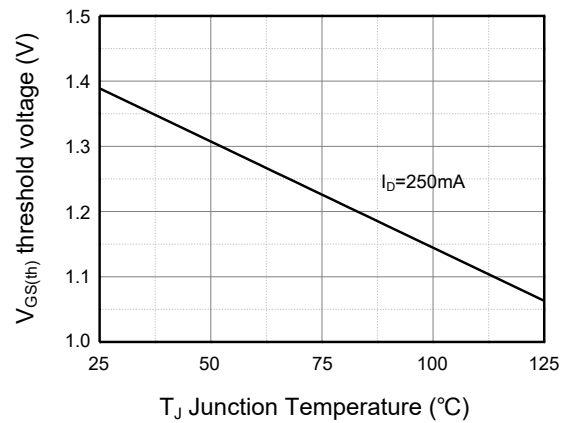
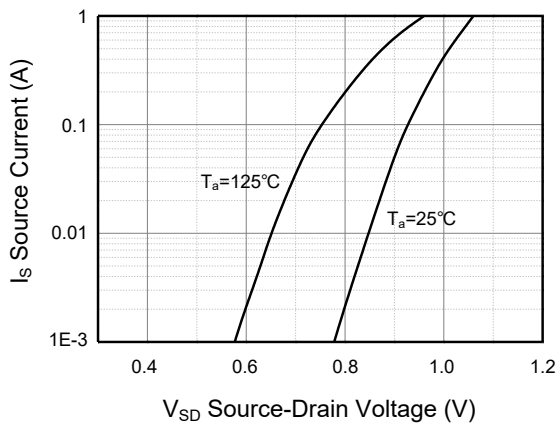
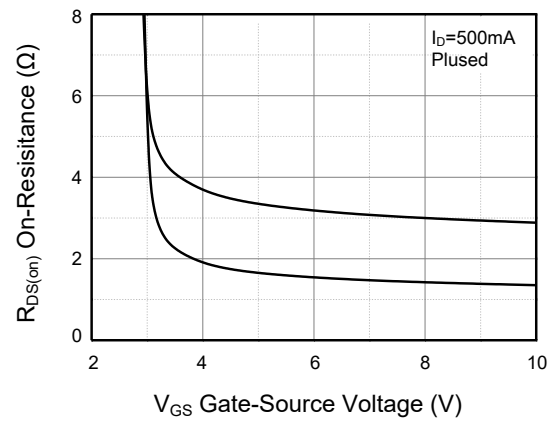
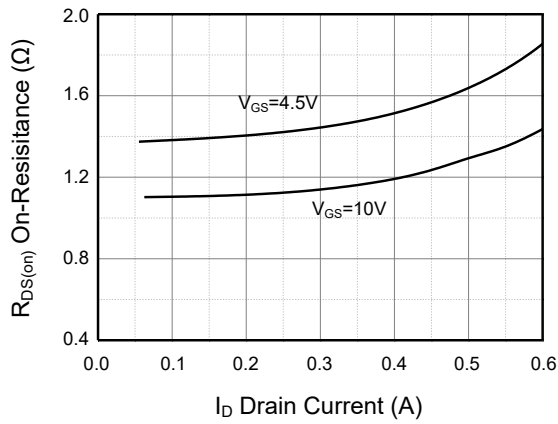
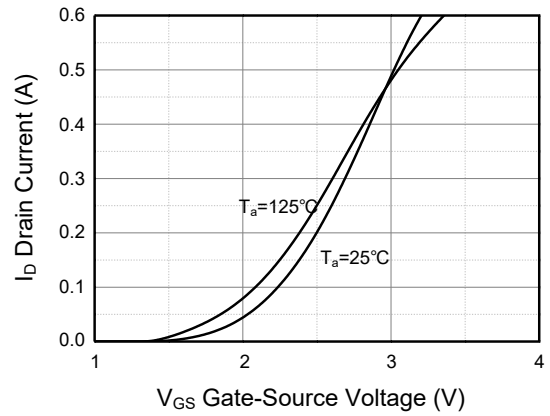
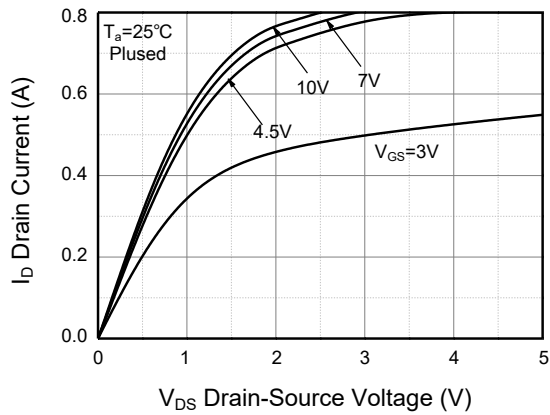
(Ta=25°C unless otherwise specified)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Static Characteristics						
Drain-Source Breakdown Voltage	$V_{(BR)DSS}$	$V_{GS}=0V, I_D=250\mu A$	60	--	--	V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=48V, V_{GS}=0V$	--	--	1	μA
Gate-Body Leakage Current	I_{GSS}	$V_{GS}=\pm 20V, V_{DS}=0V$	--	--	± 10	μA
Gate Threshold Voltage ^{Note3}	$V_{GS(th)}$	$V_{DS}=V_{GS}, I_D=250\mu A$	1	1.4	2.5	V
Drain-Source On-Resistance ^{Note3}	$R_{DS(on)}$	$V_{GS}=10V, I_D=0.5A$	--	1.3	5	Ω
		$V_{GS}=4.5V, I_D=0.2A$	--	1.4	5.3	Ω
Dynamic Characteristics						
Input Capacitance	C_{iss}	$V_{DS}=10V, V_{GS}=0V, f=1MHz$	--	--	40	pF
Output Capacitance	C_{oss}		--	--	30	pF
Reverse Transfer Capacitance	C_{rss}		--	--	10	pF
Switching Characteristics						
Turn-on Delay Time	$t_{d(on)}$	$V_{GS}=10V, V_{DD}=50V,$	--	--	10	nS
Turn-off Delay Time	$t_{d(off)}$	$R_G=50\Omega, R_{GS}=50\Omega, R_L=250\Omega$	--	--	15	nS
Reverse Recovery Time	t_{rr}	$V_{GS}=0V, I_S=300mA, V_R=25V,$ $di_s/dt=-100A/\mu S$	--	30	--	nS
Recovered Charge	Q_r	$V_{GS}=0V, I_S=300mA, V_R=25V,$ $di_s/dt=-100A/\mu S$	--	30	--	nC
Source-Drain Diode Characteristics						
Diode Forward Voltage ^{Note3}	V_{SD}	$V_{GS}=0V, I_S=0.3A$	--	--	1.5	V
Diode Forward Current ^{Note2}	I_S		--	--	0.2	A

- Note: 1. Repetitive rating: Pulse width limited by junction temperature.
 2. Surface Mounted on FR4 Board, $t \leq 10$ sec.
 3. Pulse Test: Pulse width $\leq 300\mu s$, duty cycle $\leq 2\%$.



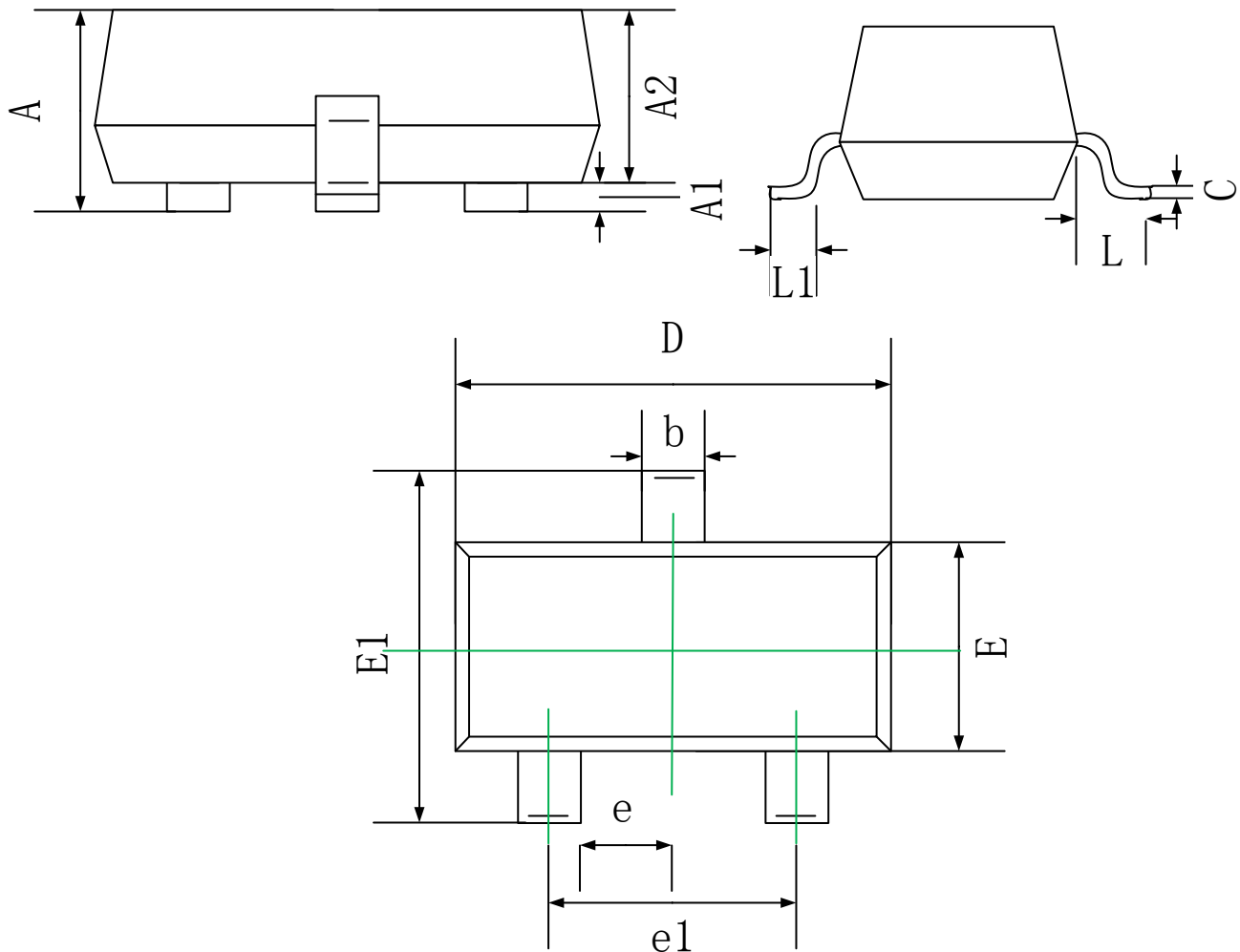
Typical Characteristic Curves



Package Outline

SOT-323

Dimensions in mm



Symbol	Dimensions In Millimeters	
	Min.	Max.
A	0.90	1.10
A1	0.00	0.10
A2	0.90	1.00
b	0.30	0.50
c	0.10	0.15
D	2.00	2.20
E	1.15	1.35
E1	2.15	2.40
e	0.65 TYP.	
e1	1.20	1.40
L	0.525 REF.	
L1	0.26	0.46

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [MOSFET](#) category:

Click to view products by [Pingjingsemi](#) manufacturer:

Other Similar products are found below :

[IRFD120](#) [JANTX2N5237](#) [2SK2267\(Q\)](#) [BUK455-60A/B](#) [TK100A10N1,S4X\(S](#) [MIC4420CM-TR](#) [VN1206L](#) [NDP4060](#) [SI4482DY](#)
[IRS2092STRPBF-EL](#) [IPS70R2K0CEAKMA1](#) [TK31J60W5,S1VQ\(O](#) [TK31J60W,S1VQ\(O](#) [TK16J60W,S1VQ\(O](#) [2SK2614\(TE16L1,Q\)](#)
[DMN1017UCP3-7](#) [EFC2J004NUZTDG](#) [P85W28HP2F-7071](#) [NTE2384](#) [DMC2700UDMQ-7](#) [DMN2080UCB4-7](#) [DMN61D9UWQ-13](#)
[US6M2GTR](#) [DMN31D5UDJ-7](#) [DMP22D4UFO-7B](#) [IPS60R3K4CEAKMA1](#) [DMN1006UCA6-7](#) [DMN16M9UCA6-7](#) [STF5N65M6](#)
[IRF40H233XTMA1](#) [STU5N65M6](#) [DMN6022SSD-13](#) [DMN13M9UCA6-7](#) [DMTH10H4M6SPS-13](#) [IPS60R360PFD7SAKMA1](#)
[DMN2990UFB-7B](#) [SSM3K35CT,L3F](#) [IPLK60R1K0PFD7ATMA1](#) [2N7002W-G](#) [MCAC30N06Y-TP](#) [IPWS65R035CFD7AXKSA1](#)
[MCQ7328-TP](#) [SSM3J143TU,LXHF](#) [DMN12M3UCA6-7](#) [PJMF280N65E1_T0_00201](#) [PJMF380N65E1_T0_00201](#)
[PJMF280N60E1_T0_00201](#) [PJMF600N65E1_T0_00201](#) [PJMF900N65E1_T0_00201](#) [PJMF900N60E1_T0_00201](#)