

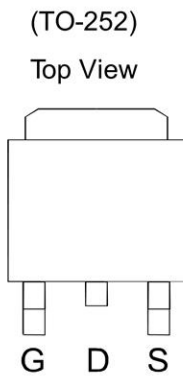
Features

- $V_{DS} -100V$
 $I_D -13A$
 $R_{DS(ON)}$ (at $V_{GS}=-10V$) < 210m Ω

Application

- Load/Power Switching
- Interfacing Switching
- Battery Management for Ultra Small Portable Electronics
- Logic Level Shift

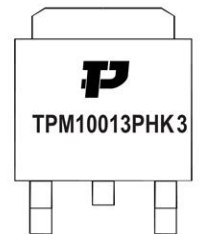
Package and Pin Configuration



1. GATE
2. DRAIN
3. SOURCE



Marking:



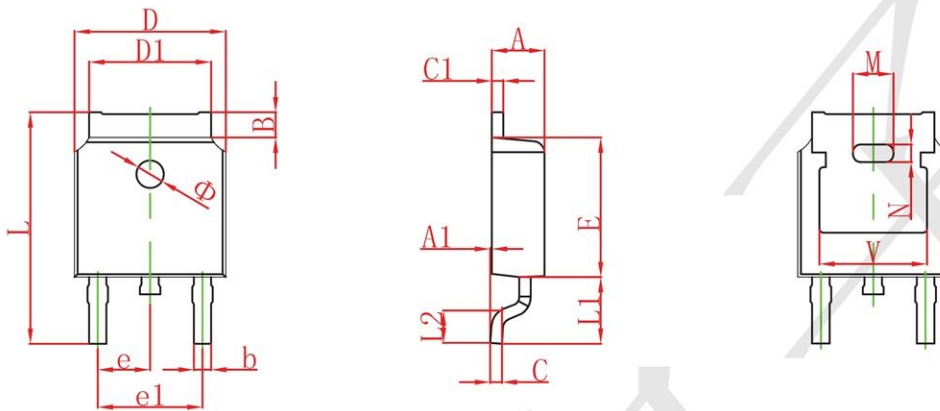
Absolute Maximum Ratings ($T_A=25^{\circ}C$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Drain-Source Voltage	V_{DS}	-100	V
Gate-Source Voltage	V_{GS}	± 20	
Continuous Drain Current	I_D	-13	A
Pulsed Drain Current ①	I_{DM}	-30	
Continuous Source-Drain Current(Diode Conduction)	I_S	13	
Power Dissipation ②	P_D	66	W
Thermal Resistance from Junction to Ambient ($t \leq 5s$)	$R_{\theta JA}$	110	$^{\circ}C/W$
Operating Junction	T_J	175	$^{\circ}C$
Storage Temperature	T_{STG}	-55~+175	$^{\circ}C$

Electrical Characteristics (T_A=25°C unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Static Parameters						
Drain-Source Breakdown Voltage	BV _{DSS}	V _{GS} = 0V, I _D = -250μA	-100			V
Gate Threshold Voltage	V _{GS(th)}	V _{DS} = V _{GS} , I _D = -250μA	-2		-4	V
Gate-Body leakage Current	I _{GSS}	V _{DS} = 0V, V _{GS} = ±20V			±100	nA
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} = -100V, V _{GS} = 0V			-1	μA
Static Drain-Source On-Resistance	R _{DS(on)}	V _{GS} = -10V, I _D = -6A		180	210	mΩ
Forward Transconductance	g _{fs}	V _{DS} = -50V, I _D = -12A		3.2		S
Diode Forward Voltage	V _{SD}	I _S = -1A, V _{GS} = 0V		-0.8	-1.2	V
Dynamic Parameters						
Input Capacitance	C _{iss}	V _{DS} = -30V, V _{GS} = 0V, f = 1MHz		760		pF
Output Capacitance	C _{oss}			260		pF
Reverse Transfer Capacitance	C _{rss}			170		pF
Total Gate Charge	Q _g	V _{DS} = -80V, V _{GS} = - 10V, I _D = -12A		58		nC
Gate Source Charge	Q _{gs}			8.3		nC
Gate Drain Charge	Q _{gd}			32		nC
Switching Parameters						
Turn-On DelayTime	t _{d(on)}	V _{DD} = -50V R _L = 10Ω, I _D = -8.4A, V _{GEN} = -10V, R _g = 9Ω		130		ns
Turn-On Rise Time	t _r			130		ns
Turn-Off DelayTime	t _{d(off)}			135		ns
Turn-Off Fall Time	t _f			140		ns

TO252 Package Information



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	2.200	2.380	0.087	0.094
A1	0.000	0.100	0.000	0.004
B	0.800	1.400	0.031	0.055
b	0.710	0.810	0.028	0.032
c	0.460	0.560	0.018	0.022
c1	0.460	0.560	0.018	0.022
D	6.500	6.700	0.256	0.264
D1	5.130	5.460	0.202	0.215
E	6.000	6.200	0.236	0.244
e	2.286 TYP.		0.090 TYP.	
e1	4.327	4.727	0.170	0.186
M	1.778REF.		0.070REF.	
N	0.762REF.		0.018REF.	
L	9.800	10.400	0.386	0.409
L1	2.9REF.		0.114REF.	
L2	1.400	1.700	0.055	0.067
V	4.830 REF.		0.190 REF.	
Φ	1.100	1.300	0.043	0.051

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

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

Click to view products by [TECH PUBLIC](#) 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](#) [DMN1053UCP4-7](#) [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](#)