

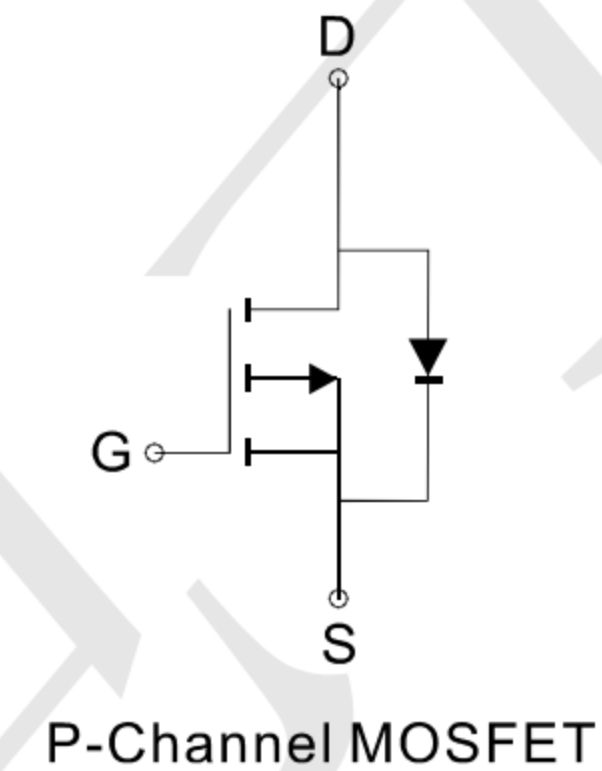
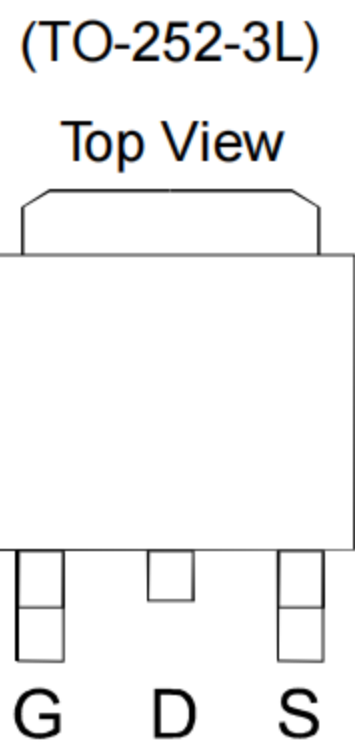
**FEATURES**

- $R_{DS(ON)}$  14m $\Omega$ @ $V_{GS}=-10V$  (Typ)
- $R_{DS(ON)}$  16m $\Omega$ @ $V_{GS}=-4.5V$ (Typ)
- Super high density cell design for extremely low  $R_{DS(ON)}$
- Exceptional on-resistance and maximum DC current capability

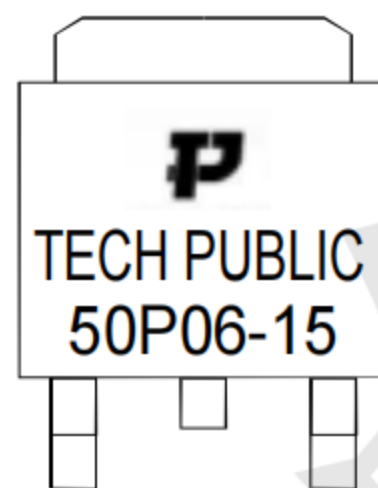
**APPLICATIONS**

- Power Management in Note book
- DC/DC Converter
- Load Switch
- LCD Display inverter

**Package and Pin Configuration**



Marking:



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

Parameter	Symbol	Maximum Ratings	Unit
Drain-Source Voltage	$V_{DS}$	-60	V
Gate-Source Voltage	$V_{GS}$	$\pm 20$	V
Continuous Drain Current*	$I_D$	$T_C=25^{\circ}C$	-61
		$T_C=70^{\circ}C$	-49
Pulsed Drain Current	$I_{DM}$	-244	A
Maximum Power Dissipation*	$P_D$	$T_C=25^{\circ}C$	114
		$T_C=70^{\circ}C$	73
Operating Junction Temperature	$T_J$	-55 to 150	$^{\circ}C$
Thermal Resistance-Junction to Case*	$R_{\theta JC}$	1.1	$^{\circ}C/W$

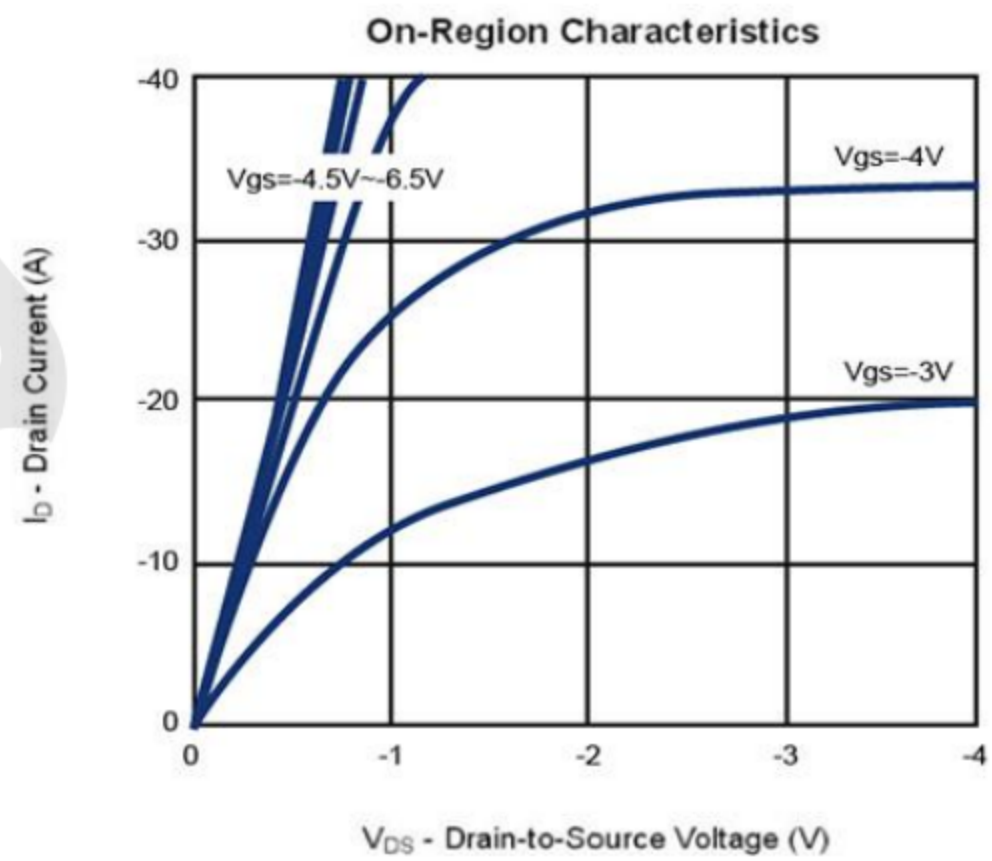
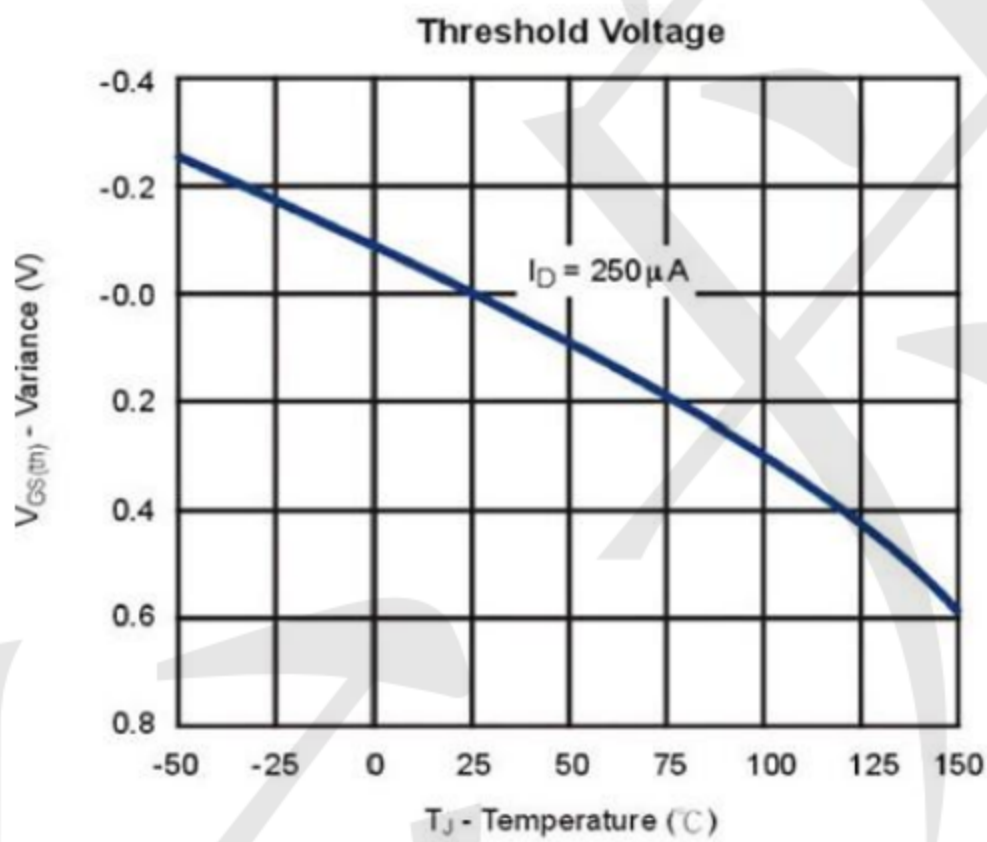
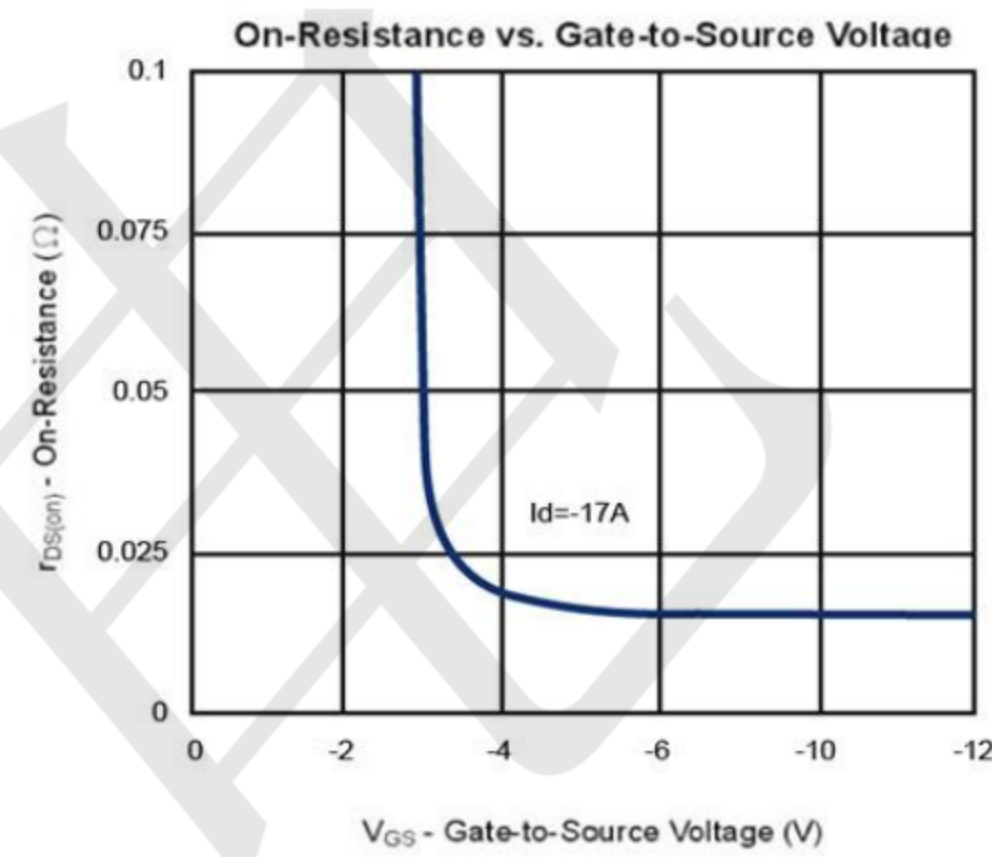
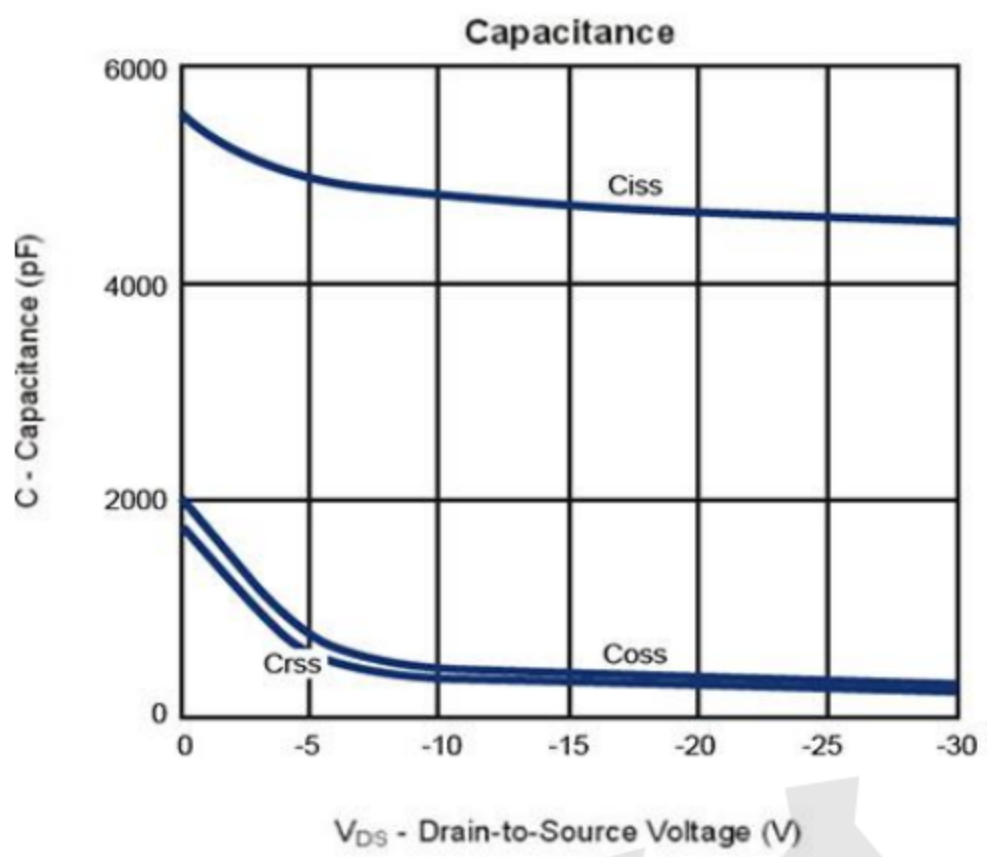
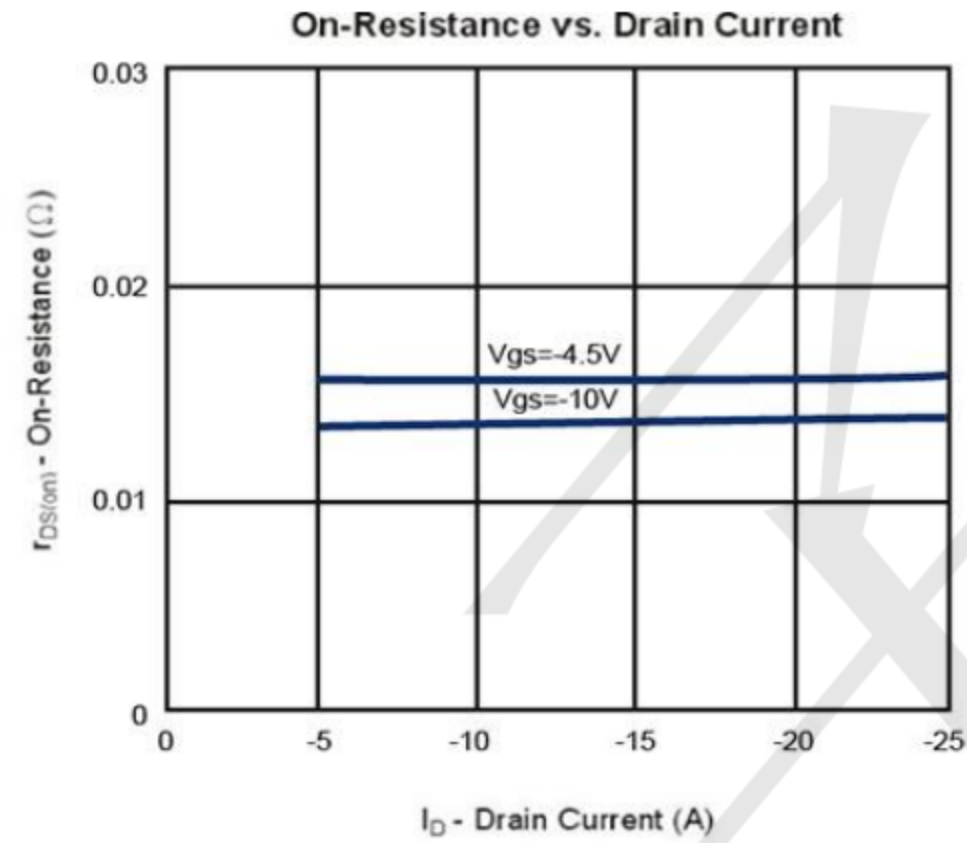
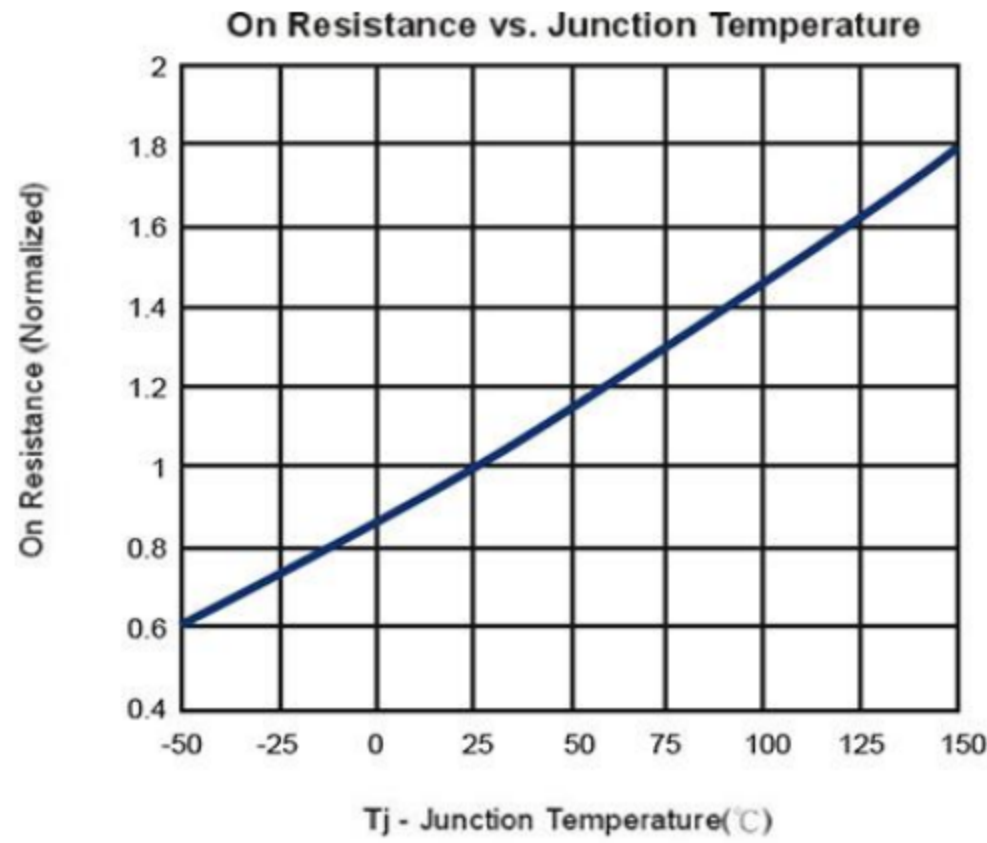
**Electrical Characteristics (T<sub>j</sub>=25°C unless otherwise noted)**

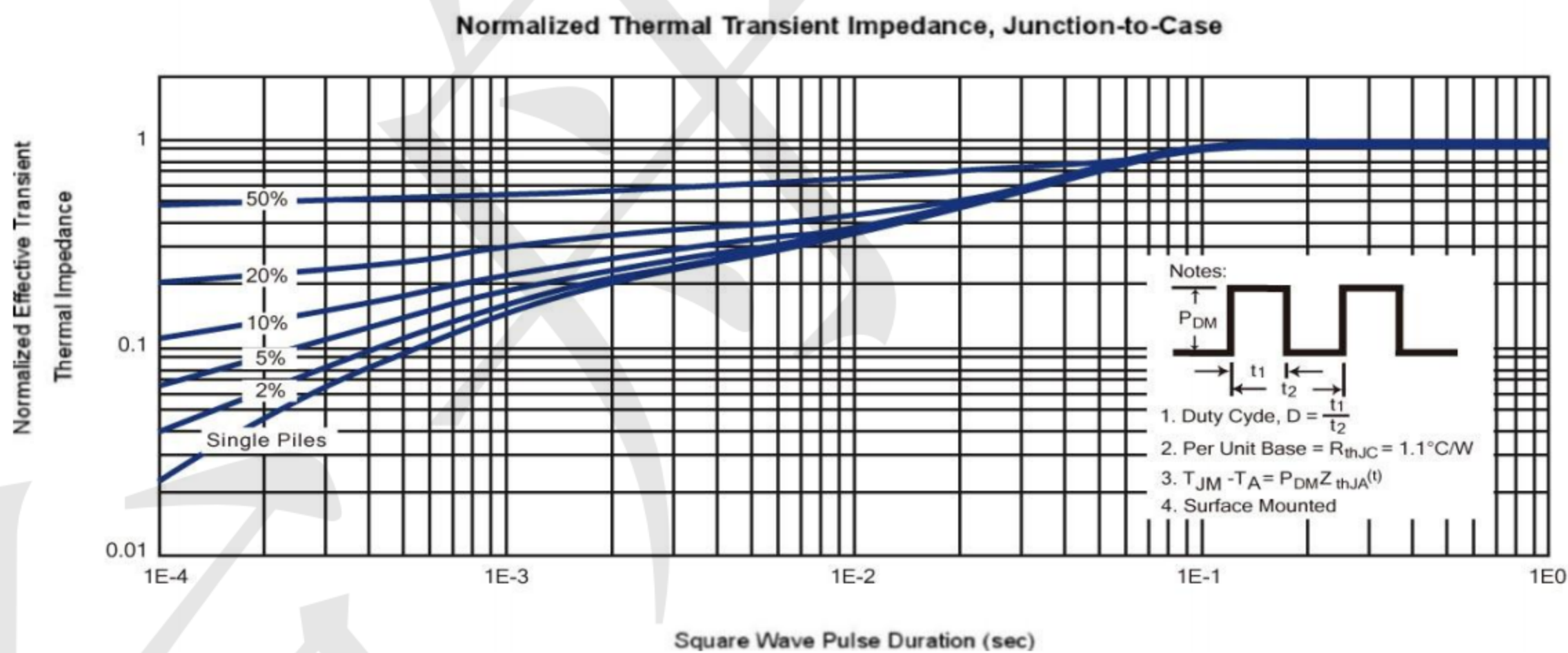
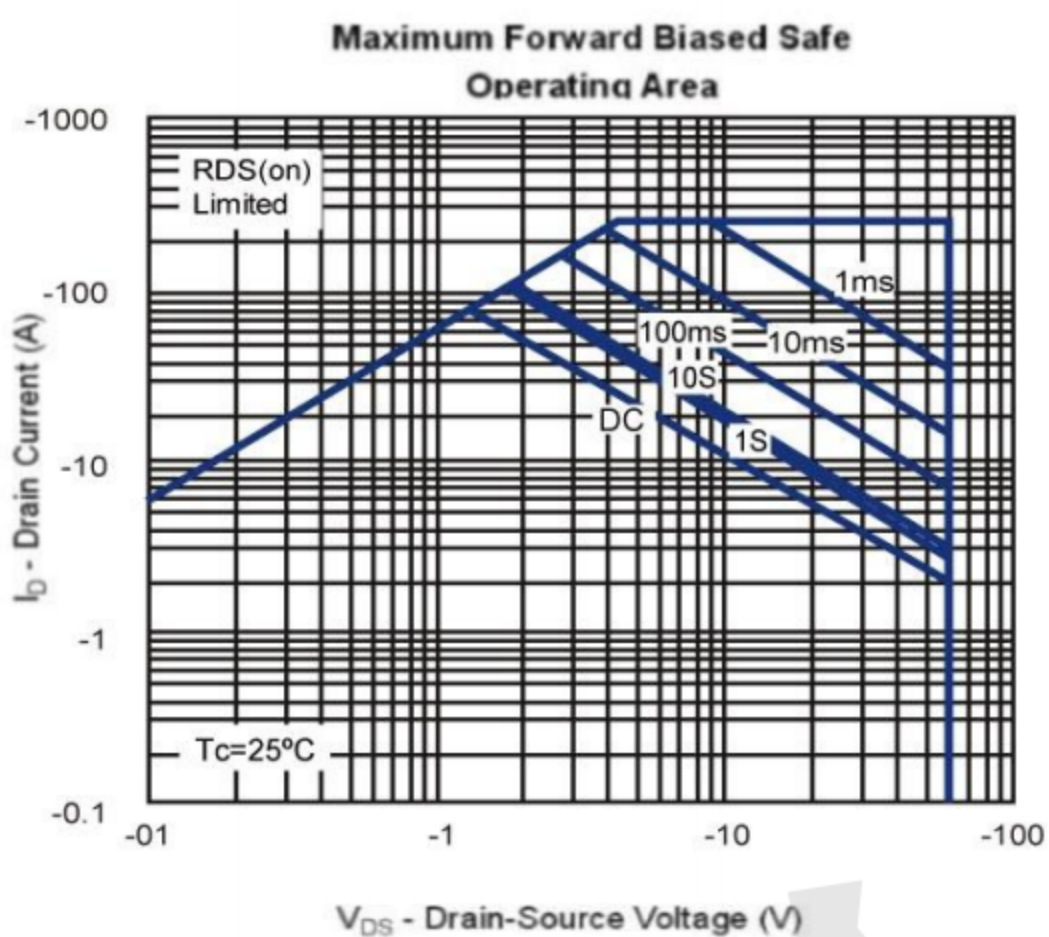
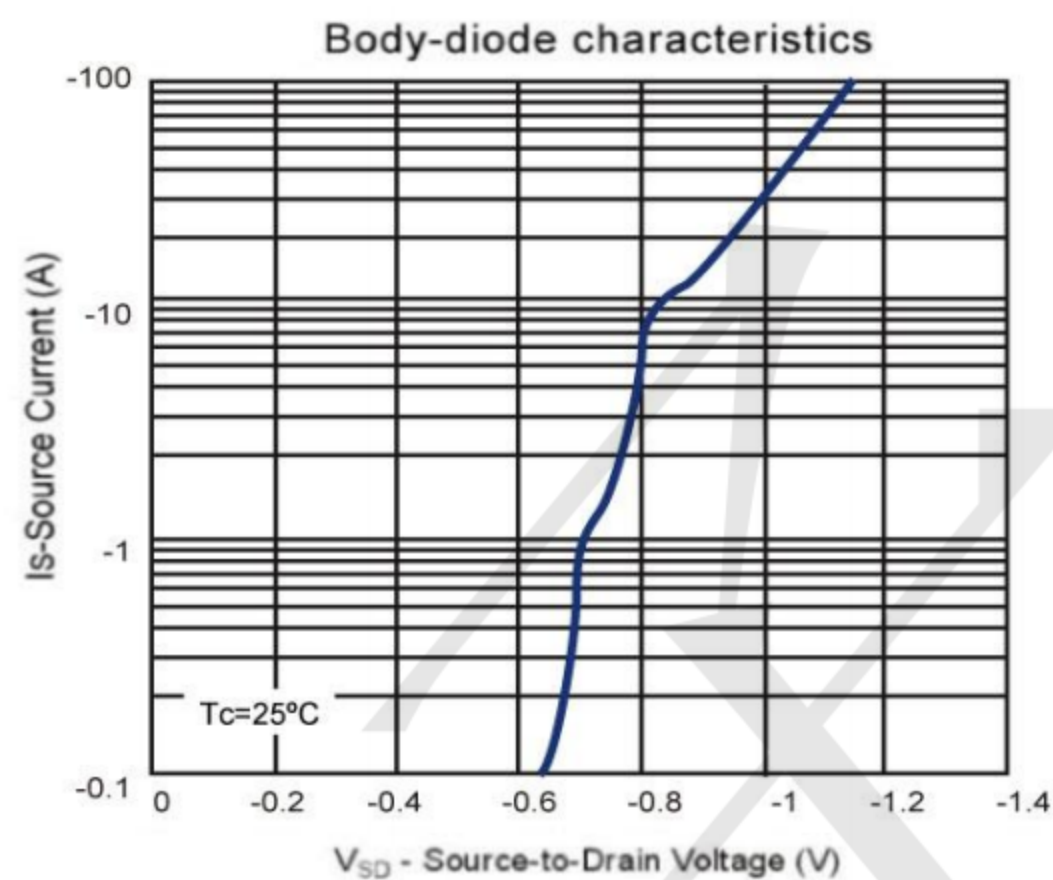
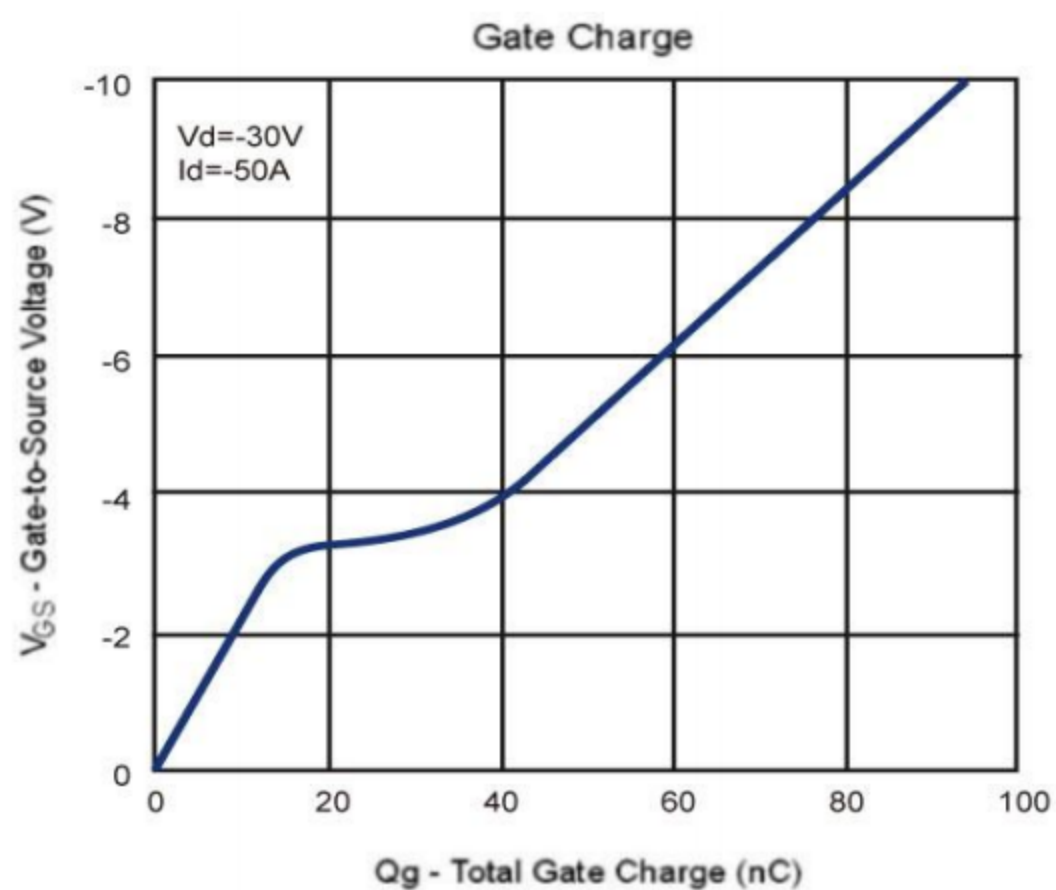
Symbol	Parameter	Limit	Min	Typ	Max	Unit
<b>STATIC</b>						
V <sub>(BR)DSS</sub>	Drain-Source Breakdown Voltage	V <sub>GS</sub> =0V, I <sub>D</sub> =-250 μA	-60			V
V <sub>GS(th)</sub>	Gate Threshold Voltage	V <sub>DS</sub> =V <sub>GS</sub> , I <sub>D</sub> =-250 μA	-1		-3	V
I <sub>GSS</sub>	Gate Leakage Current	V <sub>DS</sub> =0V, V <sub>GS</sub> =±20V			±100	nA
I <sub>DSS</sub>	Zero Gate Voltage Drain Current	V <sub>DS</sub> =-60V, V <sub>GS</sub> =0V			-1	μA
R <sub>DS(ON)</sub>	Drain-Source On-State Resistance <sup>a</sup>	V <sub>GS</sub> =-10V, I <sub>D</sub> = -17A		14	17	mΩ
		V <sub>GS</sub> =-4.5V, I <sub>D</sub> = -14A		16	20	
V <sub>SD</sub>	Diode Forward Voltage	I <sub>S</sub> =-17A, V <sub>GS</sub> =0V		-0.9	-1.2	V
<b>DYNAMIC</b>						
Q <sub>g</sub>	Total Gate Charge(10V)	V <sub>DS</sub> =-30V, V <sub>GS</sub> =-10V, I <sub>D</sub> =-50A		94		nC
Q <sub>g</sub>	Total Gate Charge(4.5V)			46		
Q <sub>gs</sub>	Gate-Source Charge	V <sub>DS</sub> =-30V, V <sub>GS</sub> =-4.5V, I <sub>D</sub> =-50A		18		
Q <sub>gd</sub>	Gate-Drain Charge			24		
C <sub>iss</sub>	Input capacitance			4707		pF
C <sub>oss</sub>	Output Capacitance	V <sub>DS</sub> =-15V, V <sub>GS</sub> =0V, F=1MHz		373		
C <sub>rss</sub>	Reverse Transfer Capacitance			336		
t <sub>d(on)</sub>	Turn-On Delay Time			53		ns
t <sub>r</sub>	Turn-On Rise Time	V <sub>DS</sub> =-30V, R <sub>L</sub> =30Ω		19		
t <sub>d(off)</sub>	Turn-Off Delay Time	V <sub>GEN</sub> =-10V, R <sub>G</sub> =6Ω		221		
t <sub>f</sub>	Turn-Off Fall Time			61		





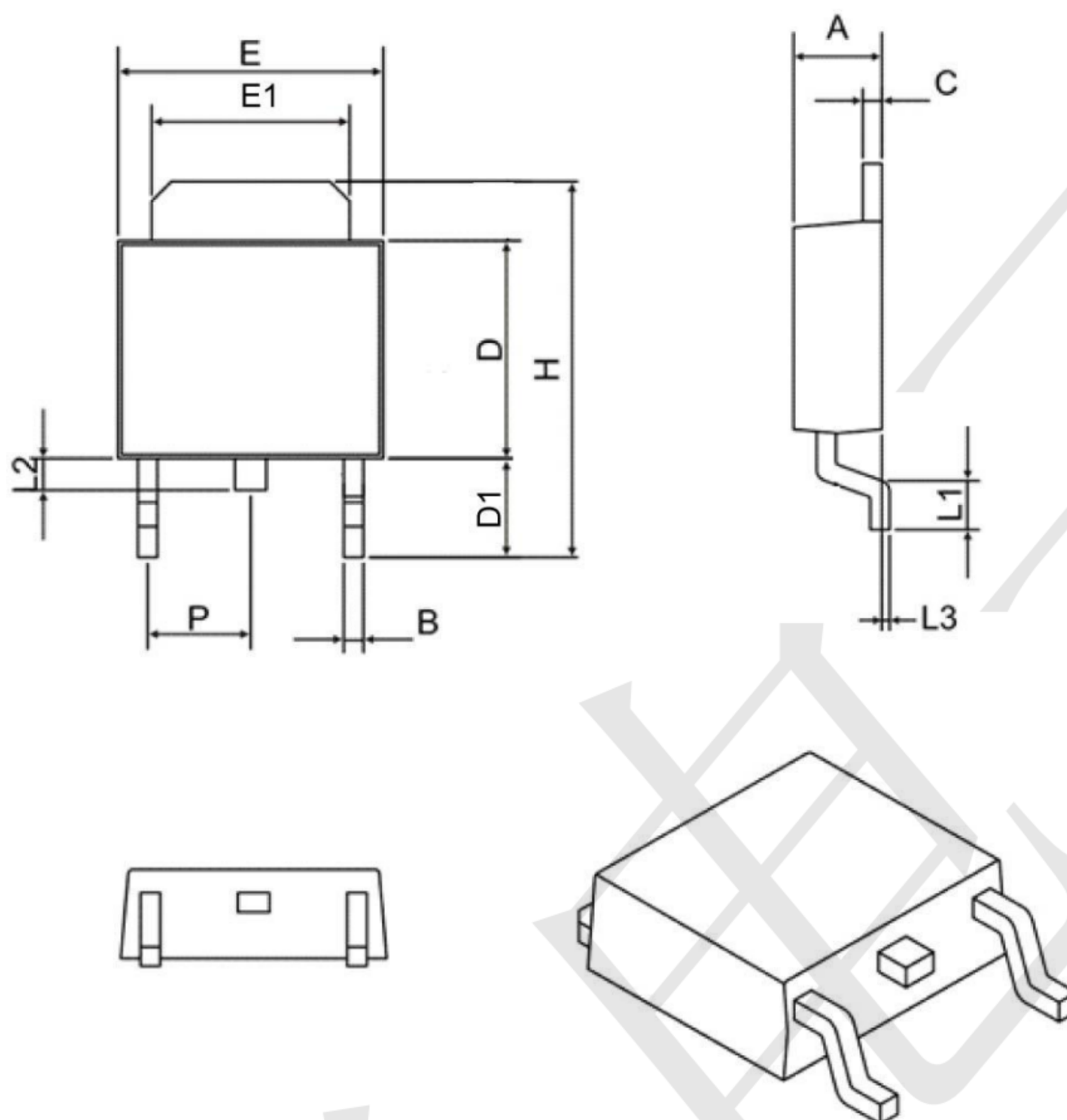
Typical Electrical and Thermal Characteristics







**TO252-2L Package Information**



SYMBOL	MIN	MAX
A	2.10	2.50
B	0.40	0.90
C	0.40	0.90
D	5.30	6.30
D1	2.20	2.90
E	6.30	6.75
E1	4.80	5.50
L1	0.90	1.80
L2	0.50	1.10
L3	0.00	0.20
H	8.90	10.40
P	2.30 BSC	

## 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](#)