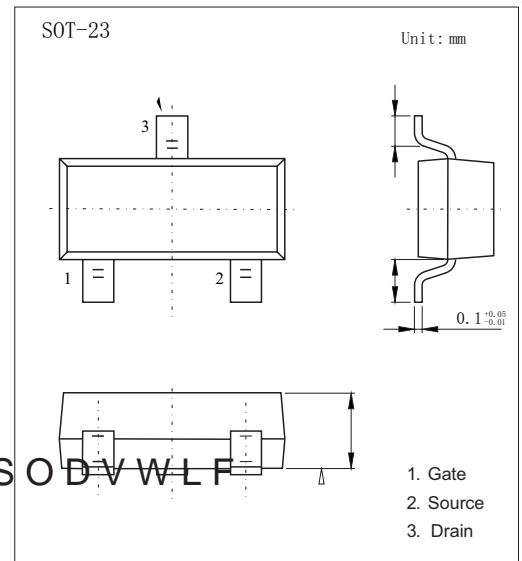


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# f & \$ P E L H Q W 7 H P S H U D W X U H X Q O H V V R W K H U Z L V H Q R W H G

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V <sub>DS</sub>	100	V
Gate-Source Voltage	V <sub>GS</sub>	±20	V
Continuous Drain Current	I <sub>D</sub>	0.17	A
Pulsed Drain Current	I <sub>DM</sub>	0.68	A
Power Dissipation	P <sub>D</sub>	0.36	W
Derate Above 25°C		2.8	□□□
Thermal Resistance, Junction-to-Ambient	R <sub>θJA</sub>	350	°C/W
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature Range	T <sub>stg</sub>	- 5 5 t o 1 5 0	°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	V <sub>DSS</sub>	I <sub>D</sub> =250μA, V <sub>GS</sub> =0V	100			V
Zero Gate Voltage Drain Current	I <sub>DSS</sub>	V <sub>DS</sub> =100V, V <sub>GS</sub> =0V			1	μA
Gate-Body Leakage Current	I <sub>GSS</sub>	V <sub>DS</sub> =100V, V <sub>GS</sub> =0V, T <sub>J</sub> =55°C			±10	μA
Gate Threshold Voltage	V <sub>GS(th)</sub>	V <sub>DS</sub> =0V, V <sub>GS</sub> =±20V	0.8			V
Static Drain-Source On-Resistance	R <sub>DS(on)</sub>	V <sub>GS</sub> =10V, I <sub>D</sub> =0.17A			12	Ω
On-State Drain Current	I <sub>D(on)</sub>	V <sub>GS</sub> =4.5V, I <sub>D</sub> =0.17A, T <sub>J</sub> =125°C			10	A
Forward Transconductance	g <sub>FS</sub>	V <sub>GS</sub> =10V, V <sub>DS</sub> =5V	0.68			S
Input Capacitance	C <sub>iss</sub>	V <sub>DS</sub> =10V, I <sub>D</sub> =0.17A		73		pF
Output Capacitance	C <sub>oss</sub>	V <sub>GS</sub>		7		pF
Reverse Transfer Capacitance	C <sub>rss</sub>	V <sub>GS</sub>		3.4		pF
Gate Resistance	R <sub>g</sub>	V <sub>GS</sub> =15mV, f=1MHz		2.2		Ω
Total Gate Charge	Q <sub>g</sub>			1.8	2.5	nC
Gate-Source Charge	Q <sub>gs</sub>			0.2		nC
Gate-Drain Charge	Q <sub>gd</sub>			0.3		nC
Turn-On Delay Time	t <sub>d(on)</sub>			1.7	3.4	ns
Turn-On Rise Time	t <sub>r</sub>	V <sub>DD</sub> =3.0V, I <sub>D</sub> =0.28A, V <sub>GS</sub> =10V, I <sub>RGEN</sub> =6Ω		9		ns
Turn-Off Delay Time	t <sub>d(off)</sub>			17	31	ns
Turn-Off Fall Time	t <sub>f</sub>			2.4	5	ns
Body Diode Reverse Recovery Time	t <sub>rr</sub>	I <sub>F</sub> =0.17A, I <sub>d</sub> /dt=100A/μs		11		ns
Body Diode Reverse Recovery Charge	Q <sub>rr</sub>			3		nC
Maximum Body Diode Continuous Current	I <sub>S</sub>				0.17	A
Diode Forward Voltage	V <sub>SD</sub>	I <sub>S</sub> =0.34A, V <sub>GS</sub> =0V			1.3	V

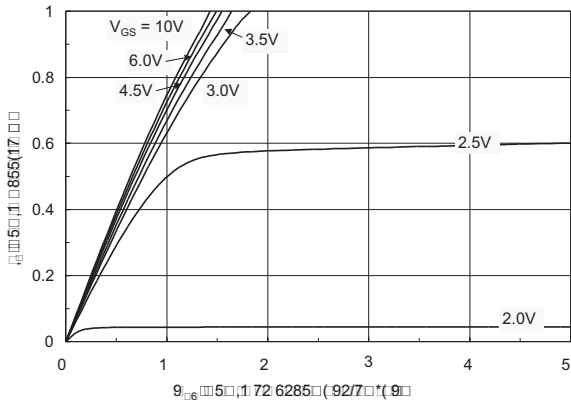


Figure 1: Drain current  $I_D$  vs. gate-source voltage  $V_{GS}$  for various  $V_{GS}$  values.

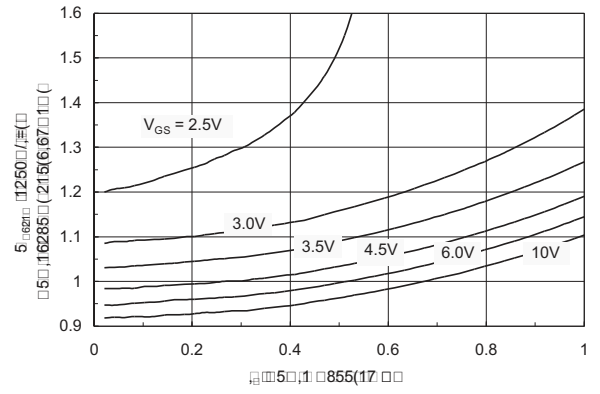


Figure 2: Drain current  $I_D$  vs. gate-source voltage  $V_{GS}$  for various  $V_{GS}$  values.

