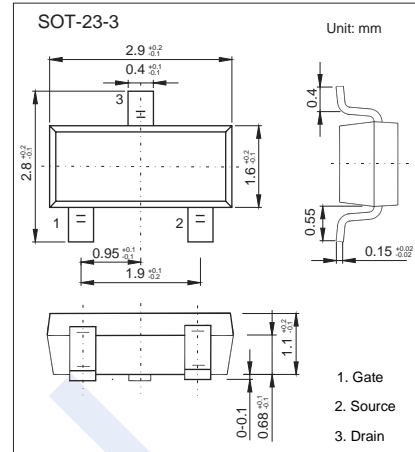
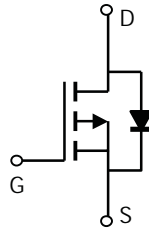


P-Channel MOSFET

2KJ6025

■ Features

- $V_{DS} (V) = -20V$
- $R_{DS(ON)} = 62\text{ m}\Omega$ ($V_{GS} = -4.5V$, Typ.)
- $R_{DS(ON)} = 84\text{ m}\Omega$ ($V_{GS} = -2.5V$, Typ.)



■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Drain-source voltage	V_{DS}	-20	V
Gate-source voltage	V_{GS}	± 10	V
Continuous drain current	I_D	$T_A=25^\circ\text{C}$ -3.5	A
		$T_A=70^\circ\text{C}$ -2.8	
Pulsed drain current	I_{DM}	-12	A
Power dissipation	P_D	$T_A=25^\circ\text{C}$ 1.25	W
		$T_A=70^\circ\text{C}$ 0.8	
Thermal Resistance.Junction-to-Ambient	$R_{\theta JA}$	130	$^\circ\text{C}/\text{W}$
Operating junction and storage temperature range	T_j, T_{stg}	-55 to +150	$^\circ\text{C}$

2KJ6025

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Drain-source breakdown voltage	V _{DSS}	V _{GS} = 0 V, I _D = -250μA	-20			V
Gate threshold voltage	V _{GS(th)}	V _{DS} = V _{GS} , I _D = -250 μA	-0.45		-0.95	V
Zero gate voltage drain current	I _{DSS}	V _{DS} = -20 V, V _{GS} = 0 V			-1	μA
		V _{DS} = -20V, V _{GS} = 0 V, T _J = 55 °C			-10	
Gate-body leakage	I _{GSS}	V _{DS} = 0 V, V _{GS} = ±10 V			±100	nA
Drain-source on-state resistance	r _{DS(on)}	V _{GS} = -4.5 V, I _D = -3.5 A		62	80	mΩ
		V _{GS} = -2.5 V, I _D = -3.0 A		84	100	
		V _{GS} = -2 V, I _D = -2.0 A		110		
On-state drain current	I _{D(on)}	V _{DS} ≤ -5 V, V _{GS} = -4.5 V	-6			A
		V _{DS} ≤ -5 V, V _{GS} = -2.5 V	-3			
Forward transconductance	g _{fs}	V _{DS} = -5 V, I _D = -3.5 A		8.5		S
Input capacitance *	C _{iss}	V _{DS} = -10V, V _{GS} = 0, f = 1 MHz		688		pF
Output capacitance *	C _{oss}			225		
Reverse transfer capacitance *	C _{rss}			150		
Total gate charge *	Q _g	V _{DS} = -10V, V _{GS} = -4.5 V, I _D = -3.5 A		8		nC
Gate-source charge *	Q _{gs}			1.5		
Gate-drain charge *	Q _{gd}			1.5		
Turn-on Delay time	t _{d(on)}	V _{DD} = -5V, R _L = 4Ω, I _D = -1A, V _{GEN} = -4.5V, R _G = 6Ω		13		ns
Turn-on Rise time	t _r			25		
Turn-off Dealy time	t _{d(off)}			55		
Turn-off Fall time	t _f			19		
Continuous source current (diode conduction) *	I _S			-1.6		A
Diode forward voltage	V _{SD}	I _S = -1.6 A, V _{GS} = 0 V			-1.2	V

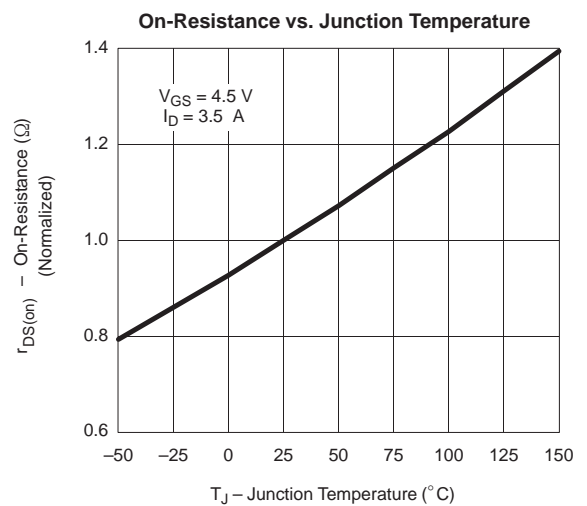
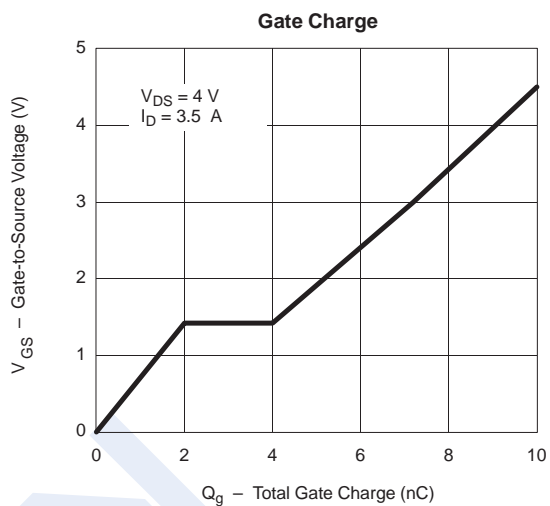
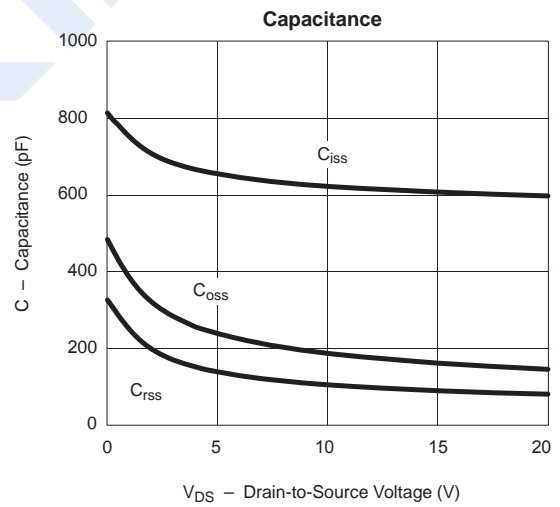
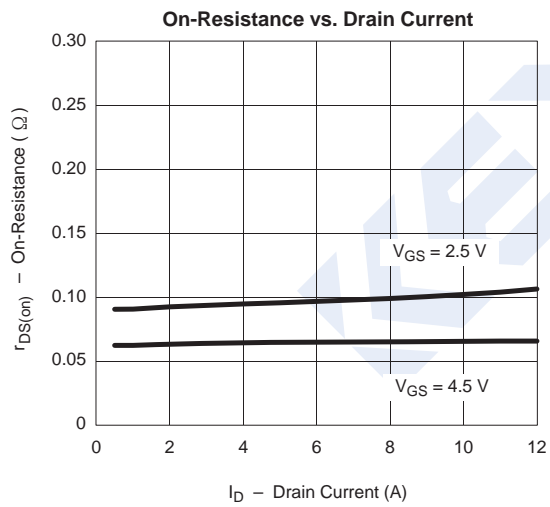
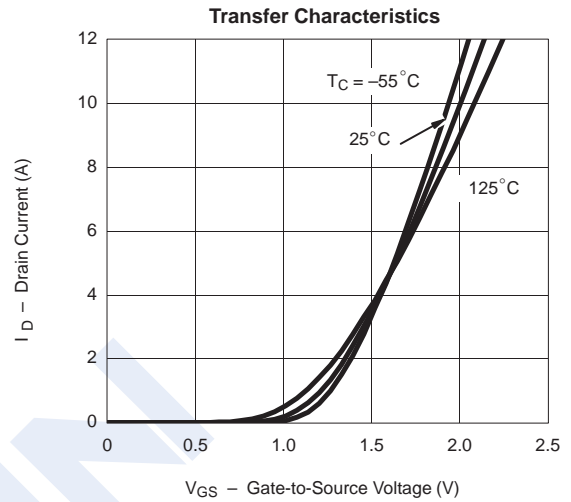
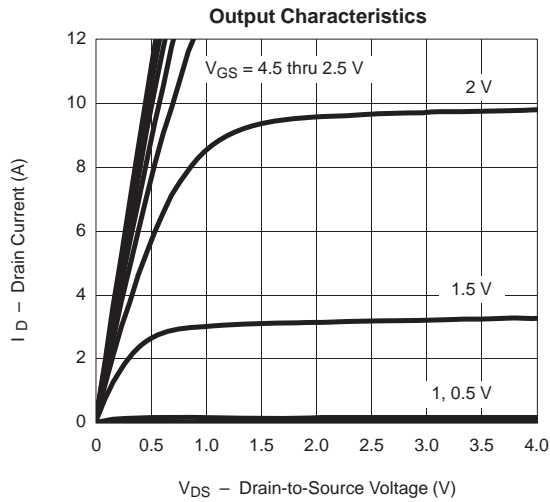
* Pulse test: PW ≤ 300 μs duty cycle ≤ 2%.

■ Marking

Marking	1F**
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2KJ6025

Typical Characteristics



2KJ6025

Typical Characteristics

