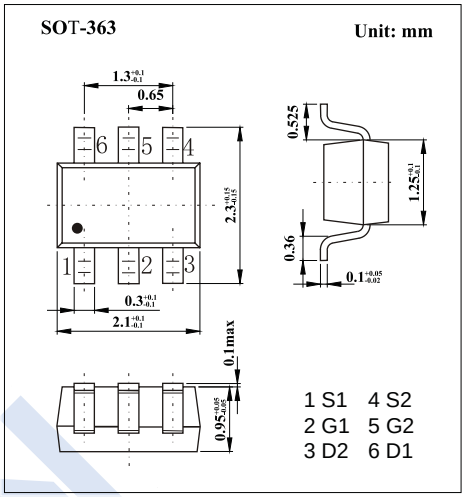
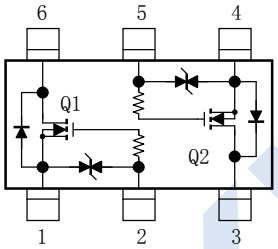
Dual N-channel MOSFET

2KK5063



■ Features

- BV_{DSS} = 30 V
- $R_{DS(ON)}$ ⩽ 4.0 Ω@ VGS = 4 V
- $R_{DS(ON)}$ ⩽ 7.0 Ω@ VGS = 2.5 V



■ Absolute Maximum Ratings (T_A = 25℃, Q1, Q2 Common)

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	30	V
Gate-Source Voltage	V_{GS}	±20	
Continuous Drain Current	I_D	100	mA
Pulsed Drain Current	I_{DP}	200	
Power Dissipation	P_D	200	mW
Junction Temperature	T_J	150	℃
Storage Temperature Range	T_{stg}	-55 to 150	

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■ Electrical Characteristics (T_A = 25℃, Q1, Q2 Common))

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	I_D = 100 μA, V_{GS} = 0V	30			V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS} = 30 V, V_{GS} = 0 V			1	μA
Gate to Source Leakage Current	I_{GSS}	V_{DS} = 0 V, V_{GS} = ±16 V			±1	
Gate to Source Threshold Voltage	V_{th}	V_{DS} = 3V , I_D = 0.1 mA	0.8		1.5	V
Static Drain-Source On-Resistance	$R_{DS(ON)}$	V_{GS} = 4 V, I_D = 10 mA		2.2	4.0	Ω
		V_{GS} = 2.5 V, I_D = 10 mA		4.0	7.0	
Forward Transconductance	g_{FS}	V_{DS} = 3 V, I_D = 10 mA	25			mS
Input Capacitance	C_{iss}	V_{GS} = 0 V, V_{DS} = 3 V, f = 1 MHz		7.8		pF
Output Capacitance	C_{oss}			8.8		
Reverse Transfer Capacitance	C_{rss}			3.6		
Turn-On DelayTime	$t_{d(on)}$	V_{GS} = 0~5 V, V_{DD} = 5 V, I_D = 10 mA		50		ns
Turn-Off DelayTime	$t_{d(off)}$			180		

■ Marking

Marking	DP

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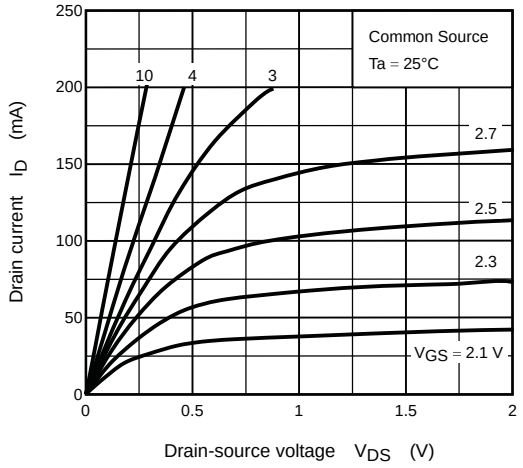
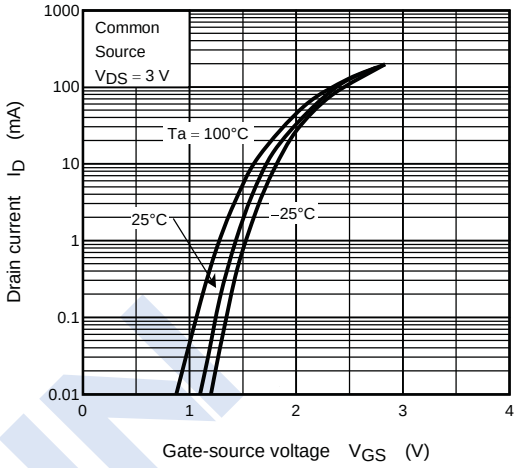
■ Typical Characterisitics (T_A = 25℃, Q1, Q2 Common)

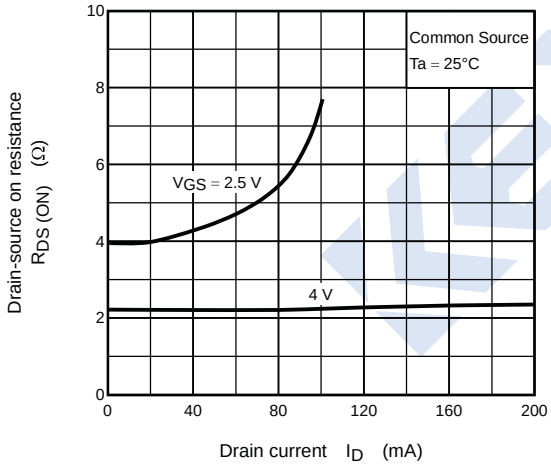
$I_D - V_{DS}$



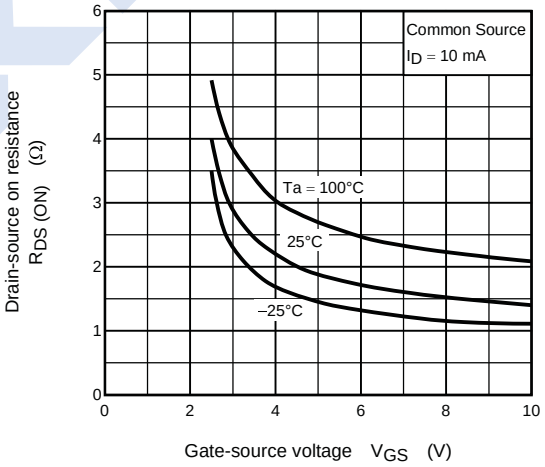
$I_D - V_{GS}$



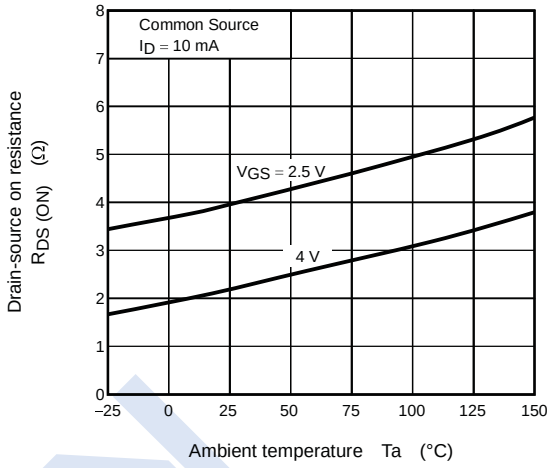
$R_{DS\ (ON)} - I_D$



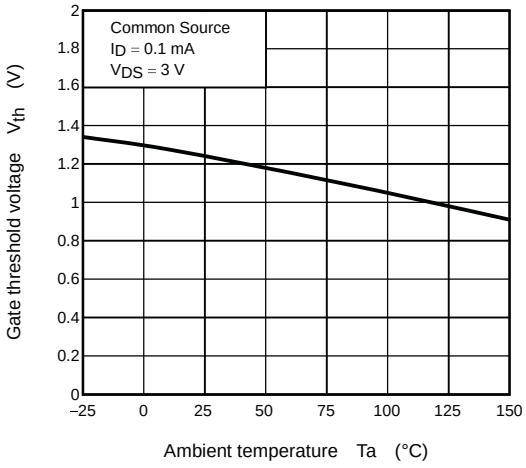
$R_{DS\ (ON)} - V_{GS}$



$R_{DS\ (ON)} - Ta$



$V_{th} - Ta$



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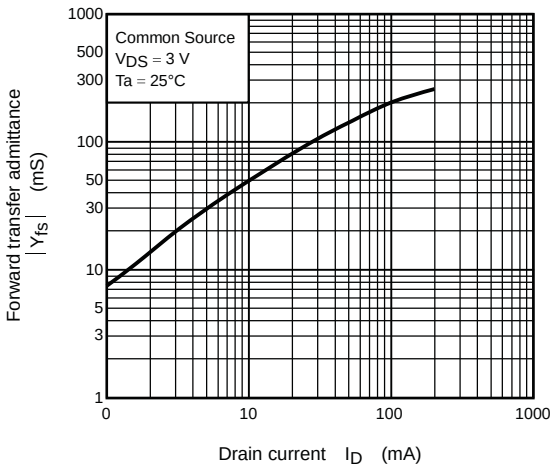
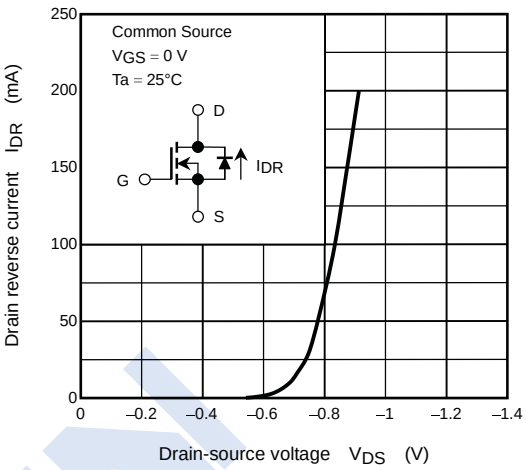
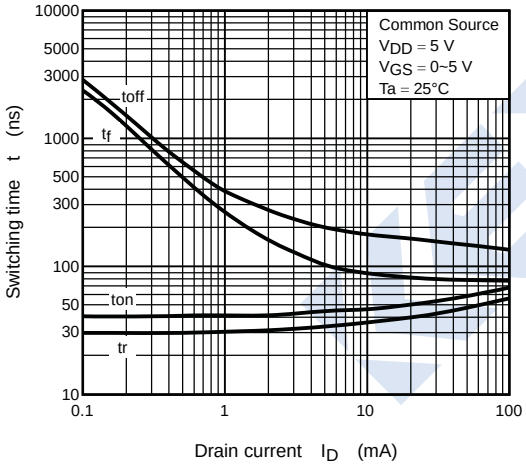
$|Y_{fs}| - I_D$



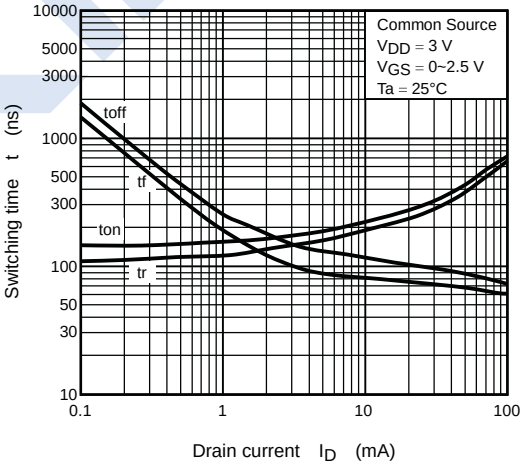
$I_{DR} - V_{DS}$



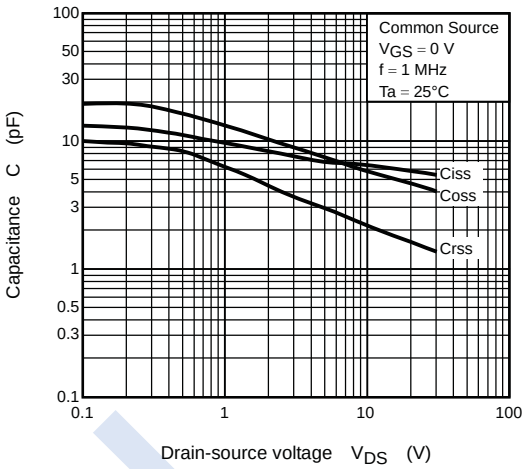
$t - I_D$



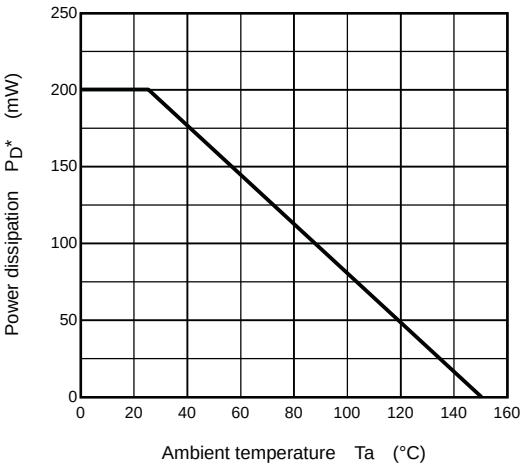
$t - I_D$



$C - V_{DS}$



$P_D^* - Ta$



*: Total rating