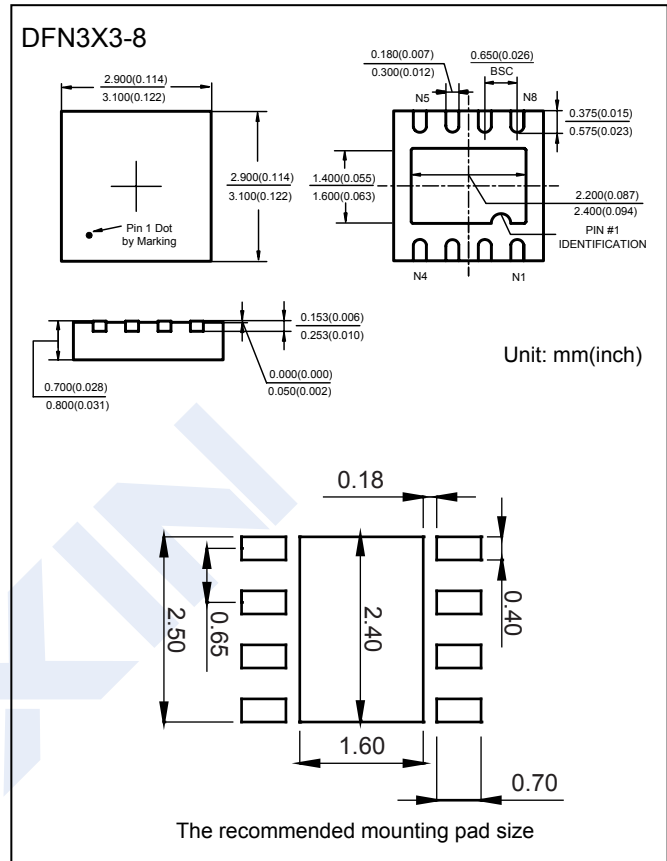
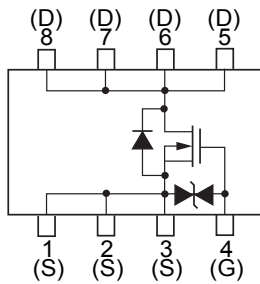


N-Channel MOSFET

FK8V03050

■ Features

- $V_{DS} (V) = 33V$
- $I_D = 8 A (V_{GS} = 10V)$
- $R_{DS(ON)} < 15m\Omega (V_{GS} = 10V)$
- $R_{DS(ON)} < 25m\Omega (V_{GS} = 4.5V)$
- High-speed switching : $Q_g = 5.1 nC$



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

Parameter	Symbol	Rating	Unit	
Drain-Source Voltage	V_{DS}	33	V	
Gate-Source Voltage	V_{GS}	± 20		
Continuous Drain Current	I_D	Steady State	8	A
		$t = 10 s$	10	
Pulsed Drain Current	I_{DM}	32		
Power Dissipation	P_D	Steady State	1	W
		$t = 10 s$	1.5	
Junction Temperature	T_J	150	$^\circ C$	
Operating Ambient Temperature	T_{opr}	-40 to 85		
Storage Temperature Range	T_{stg}	-55 to 150		

N-Channel MOSFET

FK8V03050

■ Electrical Characteristics Ta = 25°C

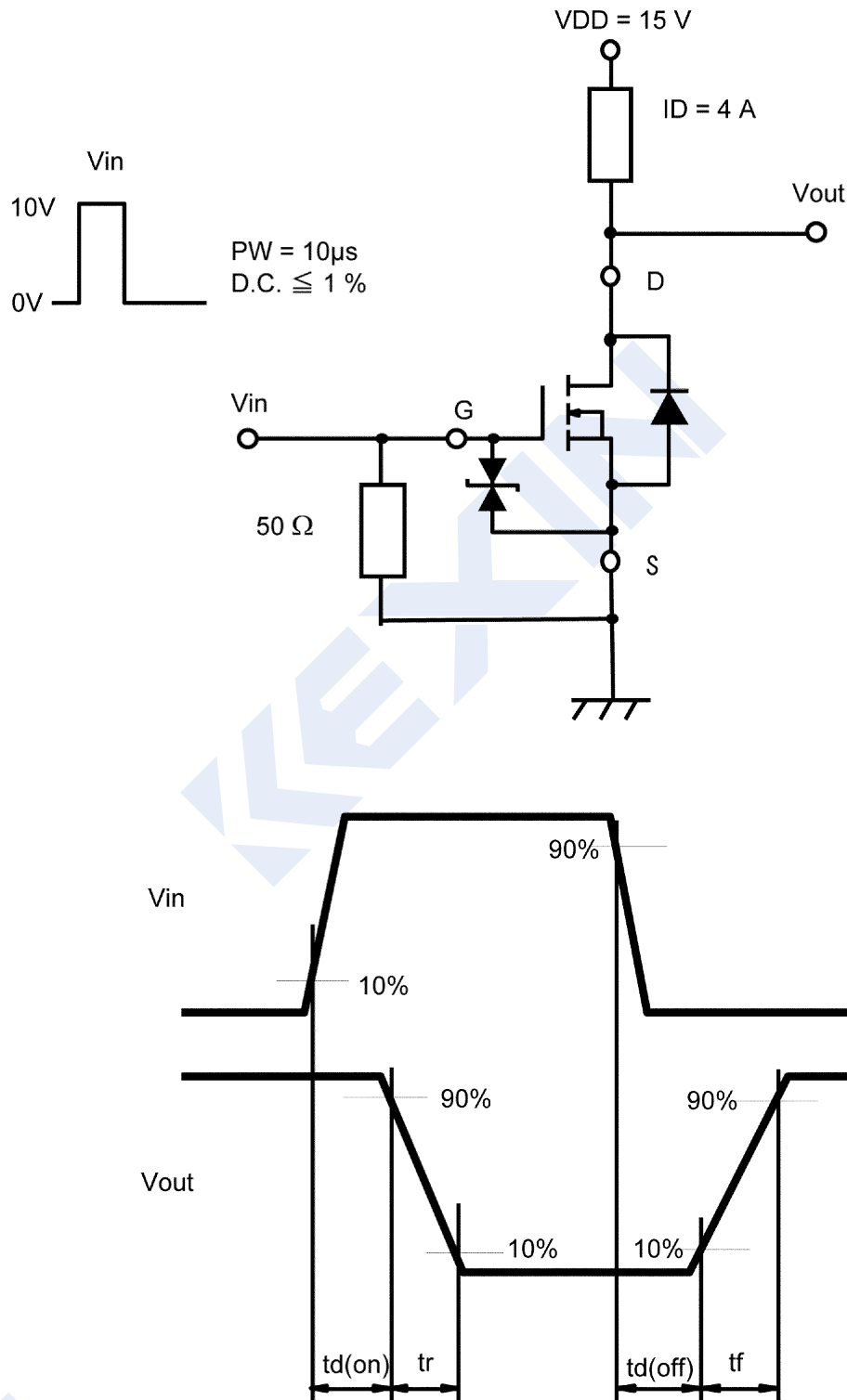
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	V _{DSS}	I _D =1 mA, V _{GS} =0V	33			V
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} =33V, V _{GS} =0V			10	uA
Gate-Body Leakage Current	I _{GSS}	V _{DS} =0V, V _{GS} =±16V			±10	uA
Gate Threshold Voltage	V _{GS(th)}	V _{DS} =10V, I _D =0.73mA	1		2.5	V
Static Drain-Source On-Resistance	R _{DS(on)}	V _{GS} =10V, I _D =4A			15	mΩ
		V _{GS} =4.5V, I _D =4A			25	
Input Capacitance	C _{iss}	V _{GS} =0V, V _{DS} =10V, f=1MHz		520		pF
Output Capacitance	C _{oss}			110		
Reverse Transfer Capacitance	C _{rss}			70		
Total Gate Charge	Q _g	V _{GS} =0 to 4.5V, V _{DS} =15V, I _D =8A		5.1		nC
Gate Source Charge	Q _{gs}			1.8		
Gate Drain Charge	Q _{gd}			2.3		
Turn-On DelayTime	t _{d(on)}	V _{GS} =0 to 10V, V _{DS} =15V, I _D =4A		8		ns
Turn-On Rise Time	t _r			4		
Turn-Off DelayTime	t _{d(off)}	V _{GS} =10 to 0 V, V _{DS} =15V, I _D =4A		32		
Turn-Off Fall Time	t _f			10		
Maximum Body-Diode Continuous Current	I _S				8	A
Diode Forward Voltage	V _{SD}	I _S =4A, V _{GS} =0V			1.2	V

■ Marking

Marking	3E
---------	----

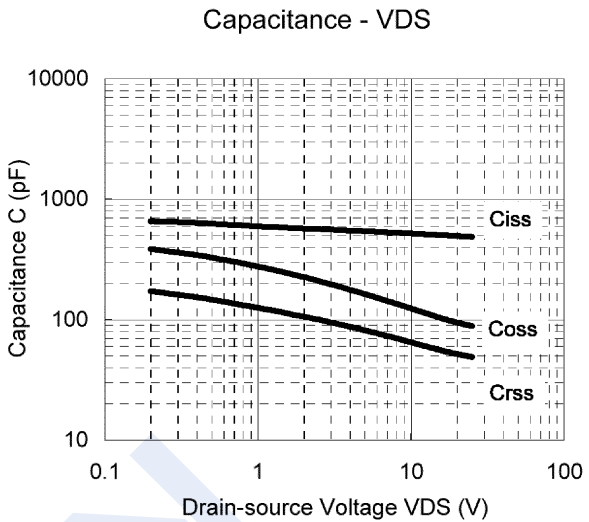
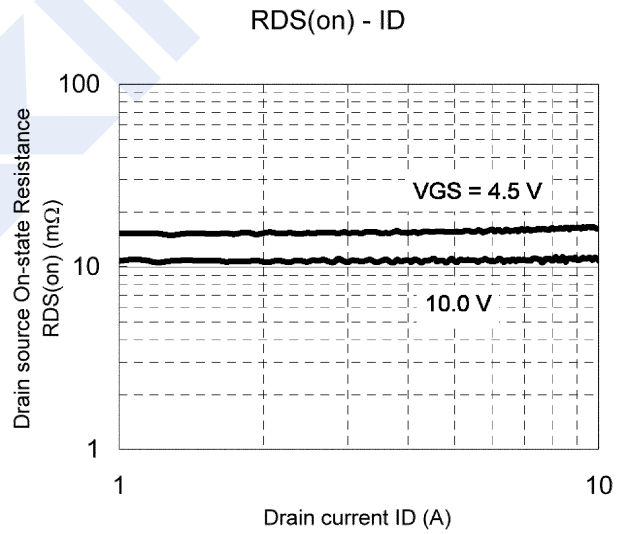
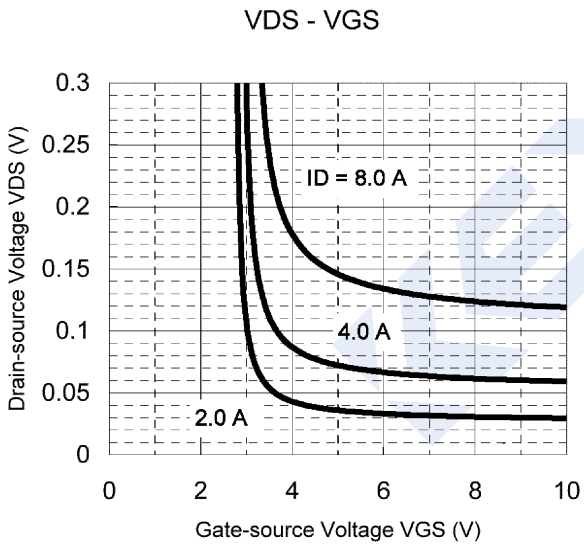
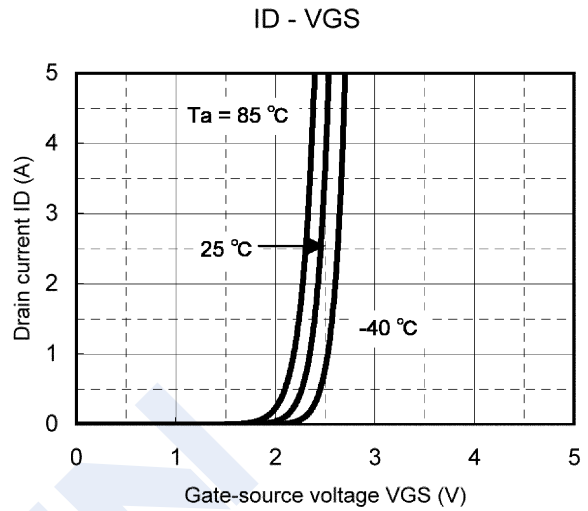
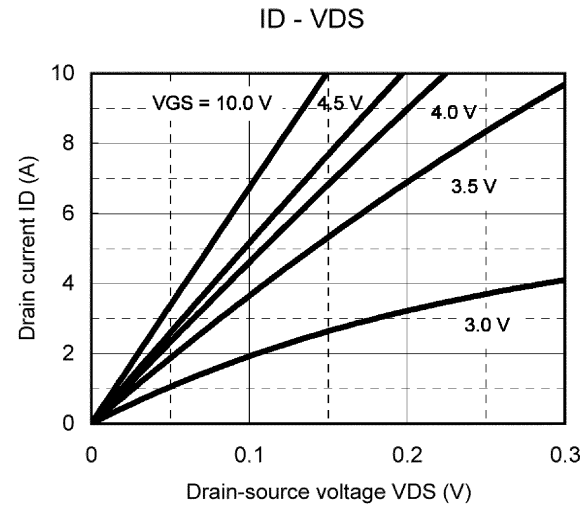
N-Channel MOSFET FK8V03050

■ Typical Characteristics

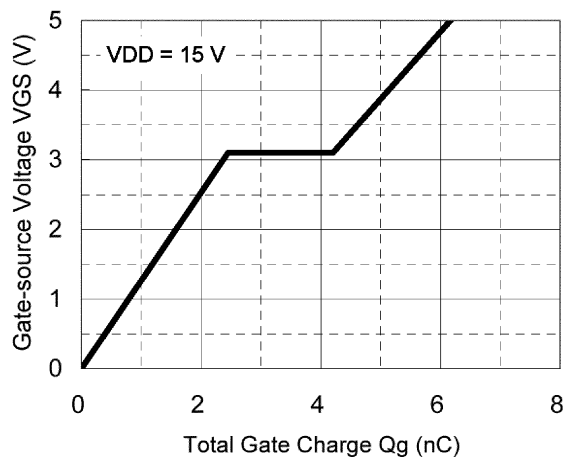


N-Channel MOSFET FK8V03050

■ Typical Characteristics



Dynamic Input/Output Characteristics



N-Channel MOSFET FK8V03050

■ Typical Characteristics

