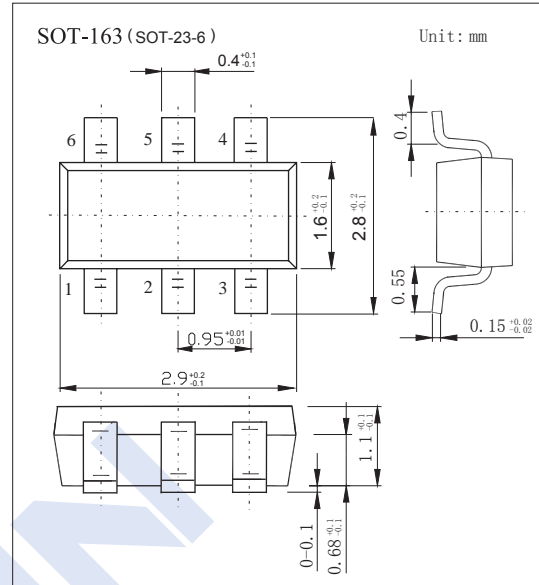
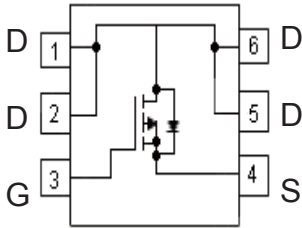


P-Channel MOSFET

2KJ6033

■ Features

- $V_{DS} (V) = -60V$
- $I_D = -3.5 A (V_{GS} = -10V)$
- $R_{DS(ON)} < 95m\Omega (V_{GS} = -10V)$
- $R_{DS(ON)} < 130 m\Omega (V_{GS} = -4.5V)$



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

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	-60	V
Gate-Source Voltage	V_{GS}	± 20	
Continuous Drain Current	I_D	$T_a = 25^\circ C$	-3.5
		$T_a = 100^\circ C$	-2.2
Pulsed Drain Current	I_{DM}	-20	A
Power Dissipation	P_D	1.6	W
Linear Derating Factor		0.013	W/ $^\circ C$
Thermal Resistance.Junction- to-Ambient	R_{thJA}	78	$^\circ C/W$
Junction Temperature	T_J	150	$^\circ C$
Junction Storage Temperature Range	T_{stg}	-55 to 150	

Note.1:Pulse Width $\leq 300\mu s$, Duty Cycle $\leq 2\%$

Note.2:1.Surface mounted on 1 in² copper pad of FR-4 board. 156/W when mounted on minimum copper pad.

P-Channel MOSFET

2KJ6033

■ Electrical Characteristics Ta = 25°C

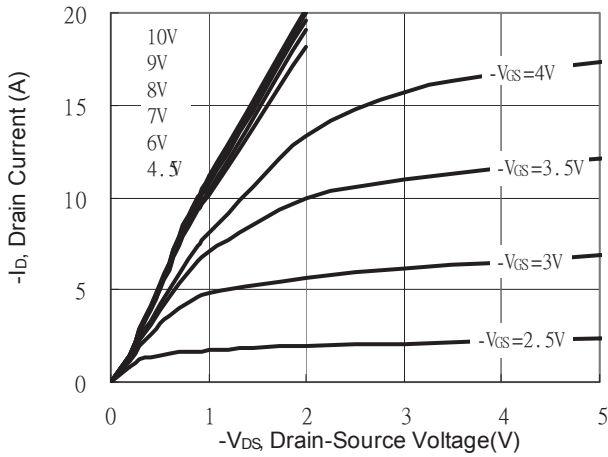
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	V _{DSS}	I _D =-250 μA, V _{GS} =0V	-60			V
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} =-48V, V _{GS} =0V			1	μA
		V _{DS} =-48V, V _{GS} =0V, T _J =70°C			25	
Gate-Body leakage current	I _{GSS}	V _{DS} =0V, V _{GS} =±20V			±100	nA
Gate Threshold Voltage	V _{GS(th)}	V _{DS} =V _{GS} I _D =-250 μA	-1		-2.5	V
Static Drain-Source On-Resistance	R _{DS(on)}	V _{GS} =-10V, I _D =-3A			95	mΩ
		V _{GS} =-4.5V, I _D =-2.7A			130	
Forward Transconductance	g _{FS}	V _{DS} =-5V, I _D =-3A		5.8		S
Input Capacitance	C _{iss}	V _{GS} =0V, V _{DS} =-30V, f=1MHz		929		pF
Output Capacitance	C _{oss}			48		
Reverse Transfer Capacitance	C _{rss}			33		
Total Gate Charge	Q _g	V _{GS} =-10V, V _{DS} =-30V, I _D =-3.5A		14		nC
Gate Source Charge	Q _{gs}			3		
Gate Drain Charge	Q _{gd}			3.4		
Turn-On DelayTime	t _{d(on)}	V _{GS} =-10V, V _{DS} =-30V, I _D =-1A, R _G =6 Ω		10		ns
Turn-On Rise Time	t _r			22		
Turn-Off DelayTime	t _{d(off)}			27		
Turn-Off Fall Time	t _f			14		
Body Diode Reverse Recovery Time	t _{rr}	I _F =-2A, V _{GS} =0V, dI/dt=100A/μs		12		nC
Body Diode Reverse Recovery Charge	Q _{rr}			7		
Maximum Body-Diode Continuous Current	I _S				-3.5	A
Body-Diode Pulsed Current	I _{SM}				-20	
Diode Forward Voltage	V _{SD}	I _S =-2A, V _{GS} =0V			-1.2	V

Note:Pulse Test : Pulse Width ≤300μs, Duty Cycle≤2%

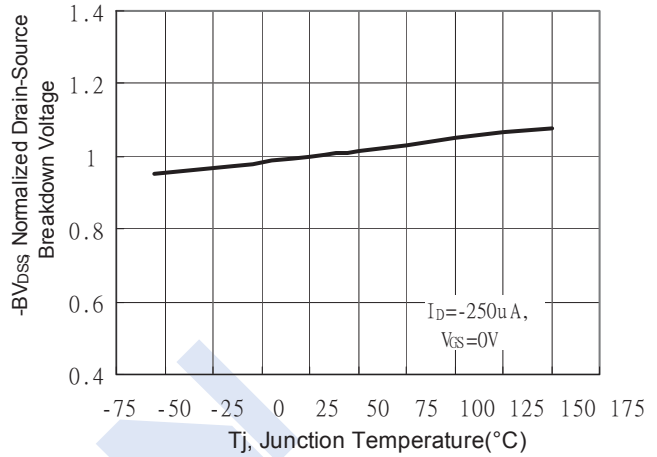
P-Channel MOSFET 2KJ6033

■ Typical Characteristics

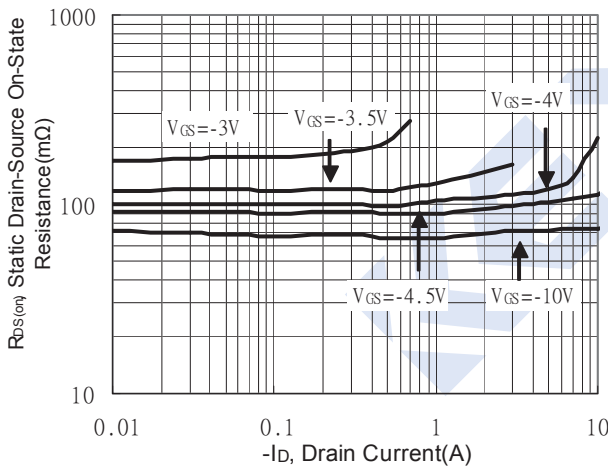
Typical Output Characteristics



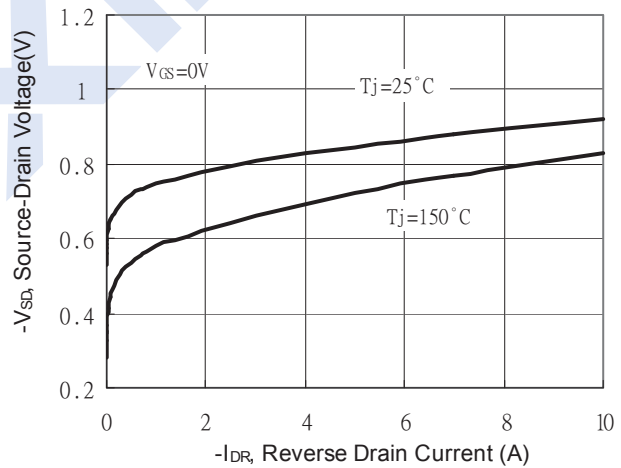
Breakdown Voltage vs Ambient Temperature



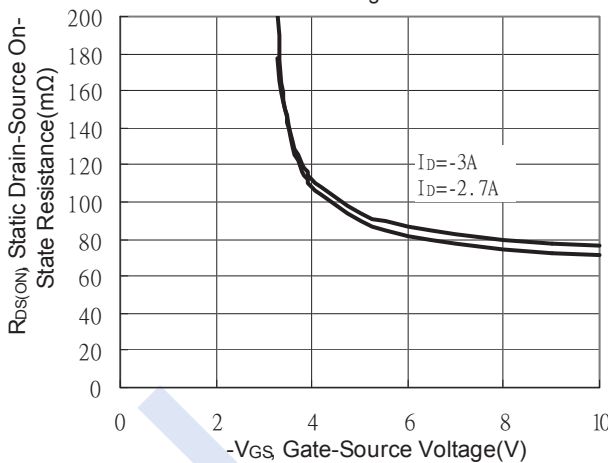
Static Drain-Source On-State resistance vs Drain Current



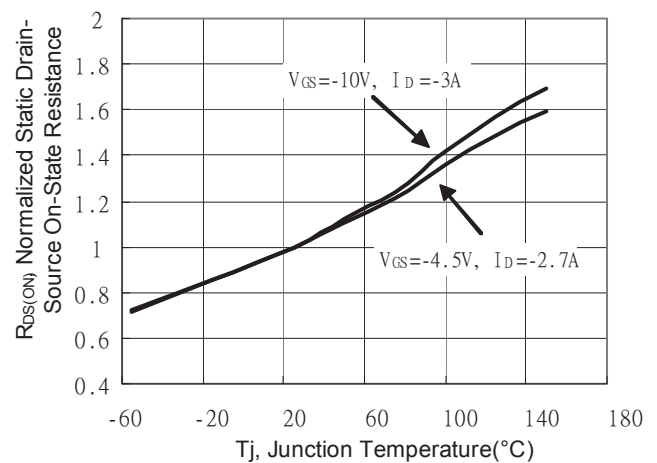
Reverse Drain Current vs Source-Drain Voltage



Static Drain-Source On-State Resistance vs Gate-Source Voltage

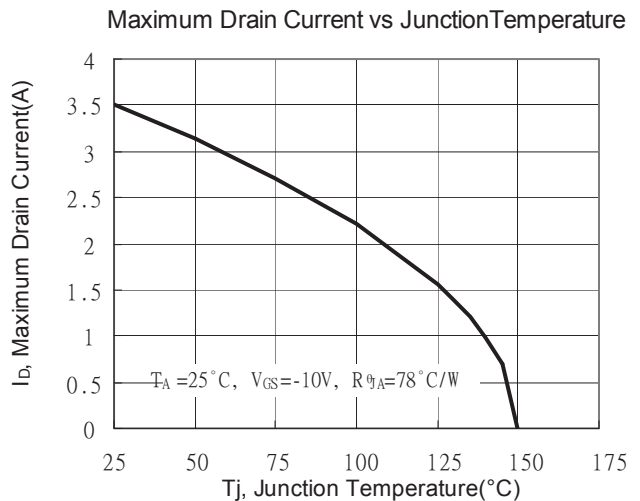
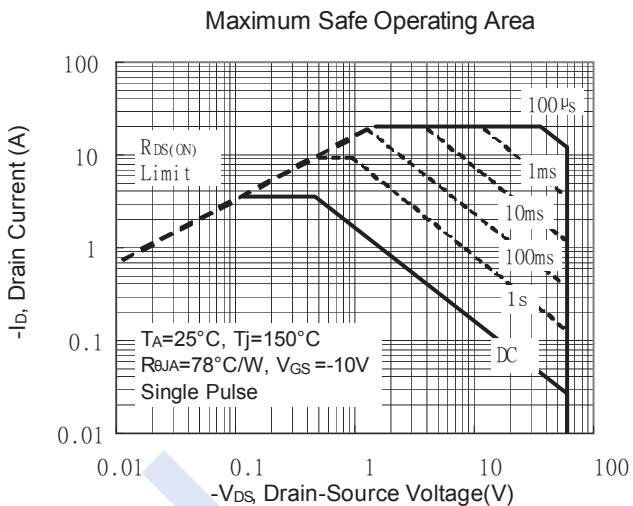
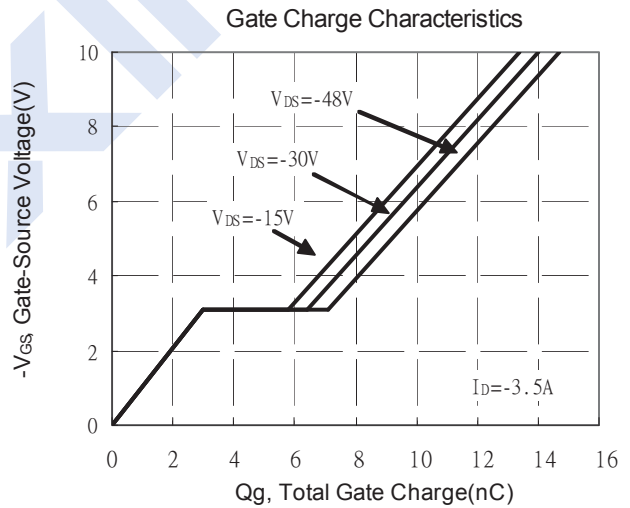
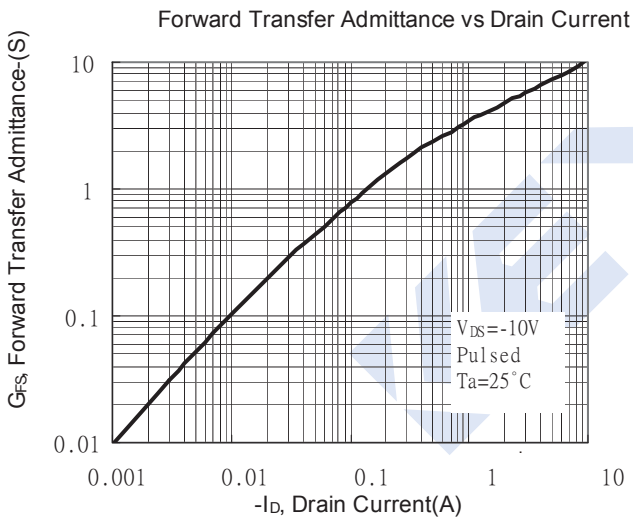
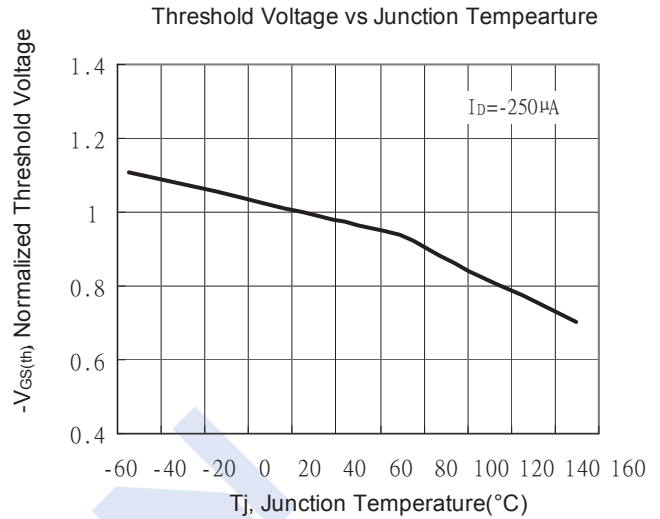
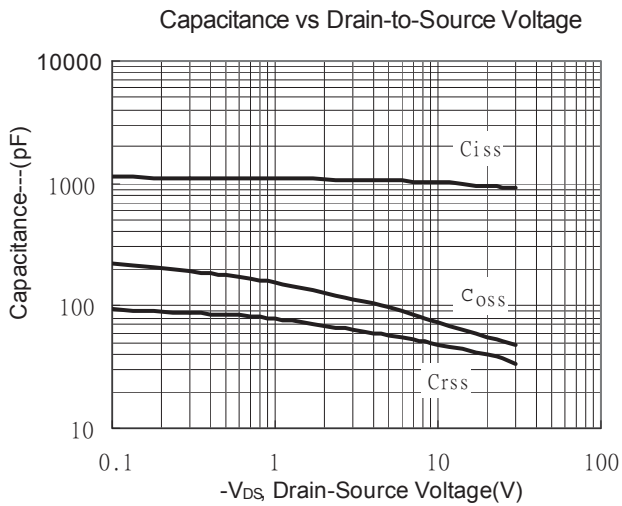


Drain-Source On-State Resistance vs Junction Temperature



P-Channel MOSFET 2KJ6033

■ Typical Characteristics



P-Channel MOSFET 2KJ6033

■ Typical Characteristics

Transient Thermal Response Curves

