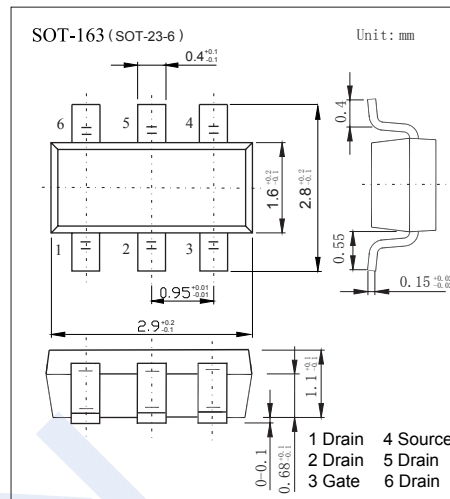
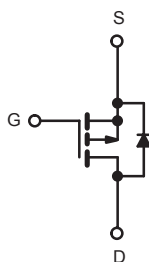


P-Channel MOSFET

SI3475DV (KI3475DV)

■ Features

- $V_{DS} (V) = -200V$
- $I_D = -0.95 A$ ($V_{GS} = -10V$)
- $R_{DS(ON)} < 1.61 \Omega$ ($V_{GS} = -10V$)
- $R_{DS(ON)} < 1.65 \Omega$ ($V_{GS} = -6V$)



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

Parameter		Symbol	Rating	Unit
Drain-Source Voltage		V_{DS}	-200	V
Gate-Source Voltage		V_{GS}	± 20	
Continuous Drain Current ($T_J = 150^\circ C$) (Note.1,2)	$T_c = 25^\circ C$	I_D	-0.95	A
	$T_c = 70^\circ C$		-0.77	
	$T_a = 25^\circ C$		-0.75	
	$T_a = 70^\circ C$		-0.59	
Pulsed Drain Current		I_{DM}	-3	mJ
Avalanche Current		I_{AS}	3	
Single-Pulse Avalanche Energy		E_{AS}	0.45	W
Power Dissipation (Note.1,2)	$T_c = 25^\circ C$	P_D	3.2	
	$T_c = 70^\circ C$		2.1	
	$T_a = 25^\circ C$		2	
	$T_a = 70^\circ C$		1.25	
Thermal Resistance.Junction- to-Ambient		R_{thJA}	62.5	$^\circ C/W$
Thermal Resistance.Junction- to-Foot		R_{thJF}	39	
Junction Temperature		T_J	150	$^\circ C$
Junction Storage Temperature Range		T_{stg}	-55 to 150	

Note.1: Surface Mounted on 1" x 1" FR4 board.

Note.2: $t = 5$ sec.

P-Channel MOSFET

SI3475DV (KI3475DV)

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	V_{DS}	$I_D = -250 \mu A$, $V_{GS} = 0V$	-200			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS} = -200V$, $V_{GS} = 0V$			-1	μA
		$V_{DS} = -200V$, $V_{GS} = 0V$, $T_J = 55^\circ C$			-10	
Gate-Body leakage current	I_{GSS}	$V_{DS} = 0V$, $V_{GS} = \pm 20V$			± 100	nA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS} = V_{GS}$, $I_D = -250 \mu A$	-2		-4	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS} = -10V$, $I_D = -0.9A$			1.61	Ω
		$V_{GS} = -6V$, $I_D = -0.7A$			1.65	
On state drain current	$I_{D(on)}$	$V_{GS} = -10V$, $V_{DS} \geq -10V$	-2			A
Forward Transconductance	g_{FS}	$V_{DS} = -10V$, $I_D = -0.9A$		3.5		S
Input Capacitance	C_{iss}	$V_{GS} = 0V$, $V_{DS} = -50V$, $f = 1MHz$		500		pF
Output Capacitance	C_{oss}			26		
Reverse Transfer Capacitance	C_{rss}			18		
Gate resistance	R_g	$f = 1MHz$		9	14	Ω
Total Gate Charge	Q_g	$V_{GS} = -10V$, $V_{DS} = -100V$, $I_D = -1A$		11.7	18	nC
		$V_{GS} = -6V$, $V_{DS} = -100V$, $I_D = -1A$		7.8	12	
Gate Source Charge	Q_{gs}	$V_{GS} = -6V$, $V_{DS} = -100V$, $I_D = -1A$		2		
Gate Drain Charge	Q_{gd}			3.7		
Turn-On DelayTime	$t_{d(on)}$	$V_{DD} = -100V$, $R_L = 100\Omega$ $I_D = -1A$, $V_{GEN} = -10V$, $R_g = 1\Omega$		9	14	ns
Turn-On Rise Time	t_r			11	18	
Turn-Off DelayTime	$t_{d(off)}$			28	42	
Turn-Off Fall Time	t_f			12	18	
Turn-On DelayTime	$t_{d(on)}$	$V_{DD} = -100V$, $R_L = 100\Omega$ $I_D = -1A$, $V_{GEN} = -6V$, $R_g = 1\Omega$		14	21	
Turn-On Rise Time	t_r			29	44	
Turn-Off DelayTime	$t_{d(off)}$			23	35	
Turn-Off Fall Time	t_f			14	21	
Body Diode Reverse Recovery Time	t_{rr}	$I_F = -1.2A$, $di/dt = 100A/\mu s$, $T_J = 25^\circ C$		84	130	nC
Body Diode Reverse Recovery Charge	Q_{rr}			235	350	
Reverse Recovery Fall Time	t_a			46		nS
Reverse Recovery Rise Time	t_b			38		
Maximum Body-Diode Continuous Current	I_S	$T_C = 25^\circ C$			-0.95	A
Pulse Diode Forward Current	I_{SM}				-3	
Diode Forward Voltage	V_{SD}	$I_S = -1A$, $V_{GS} = 0V$			-1.2	V

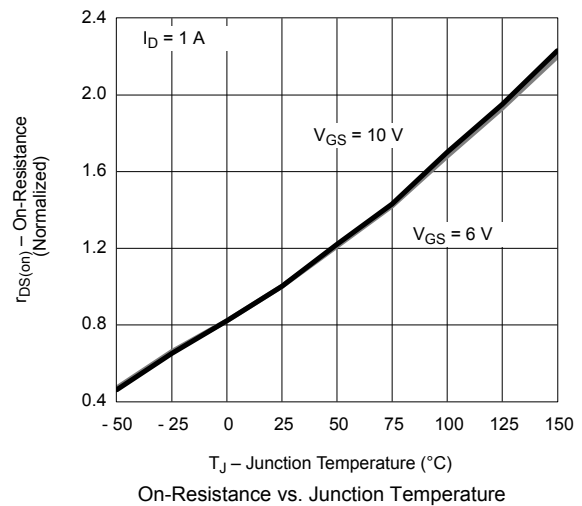
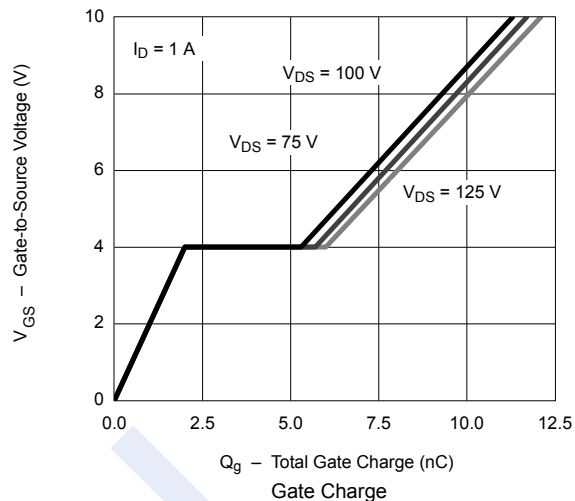
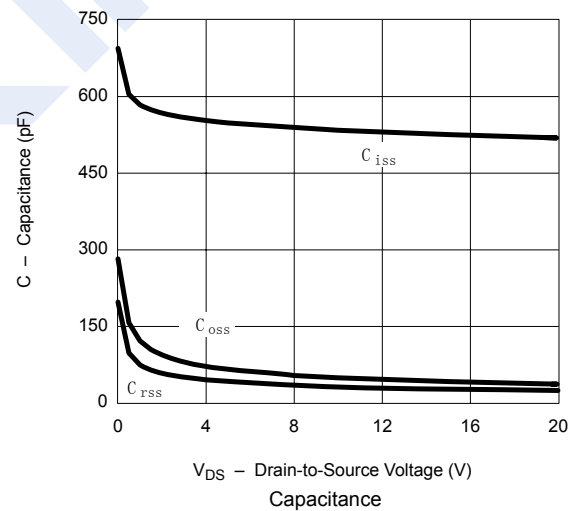
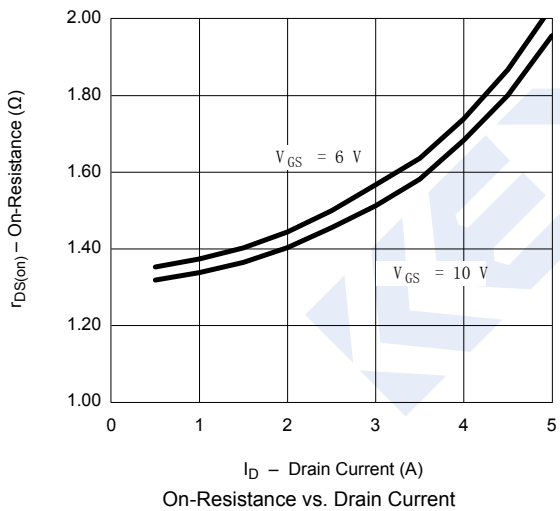
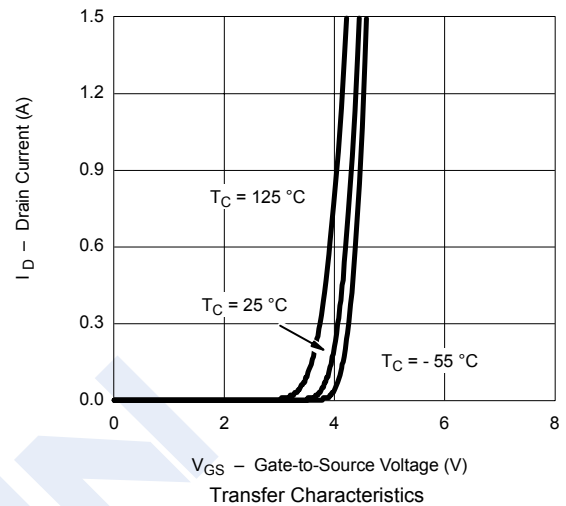
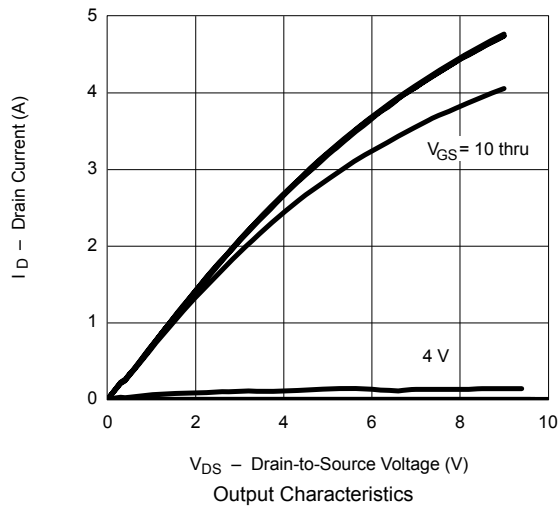
■ Marking

Marking	AI***
---------	-------

P-Channel MOSFET

SI3475DV (KI3475DV)

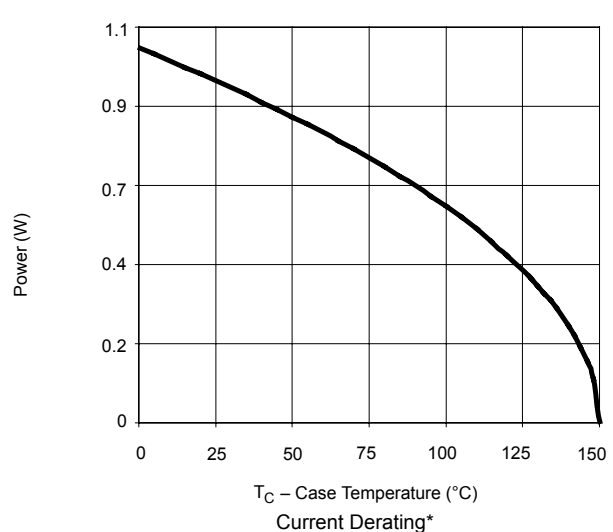
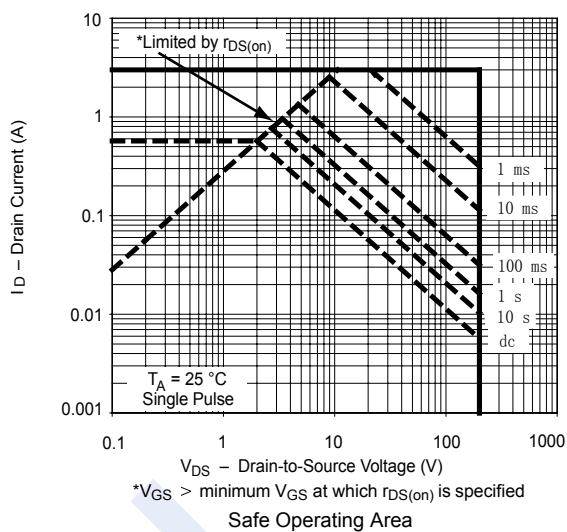
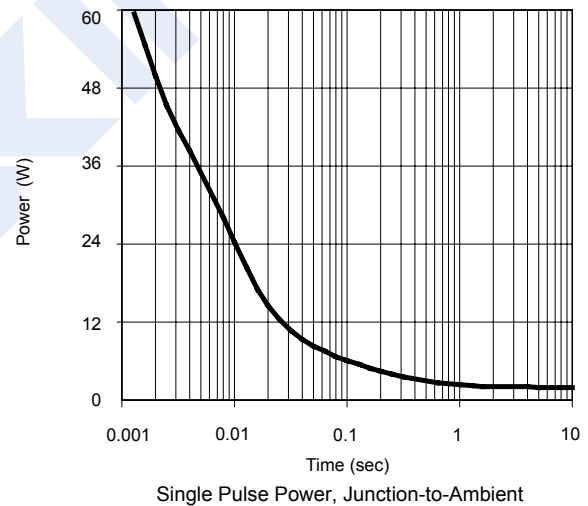
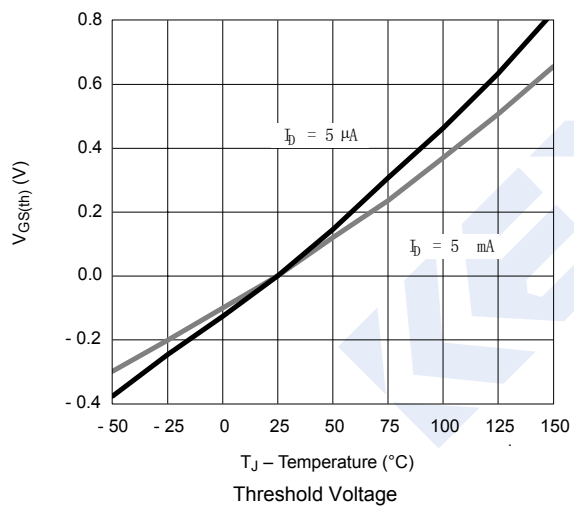
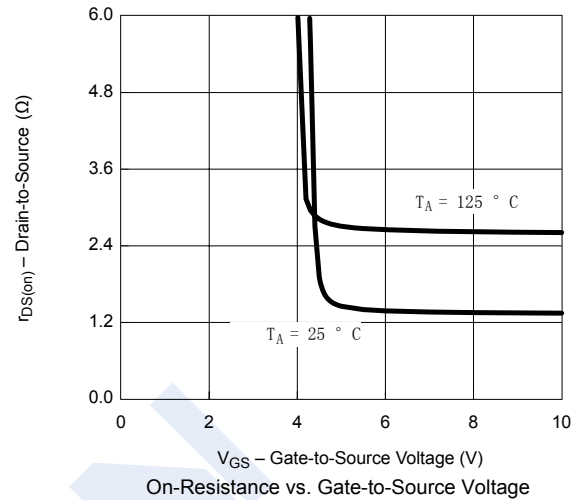
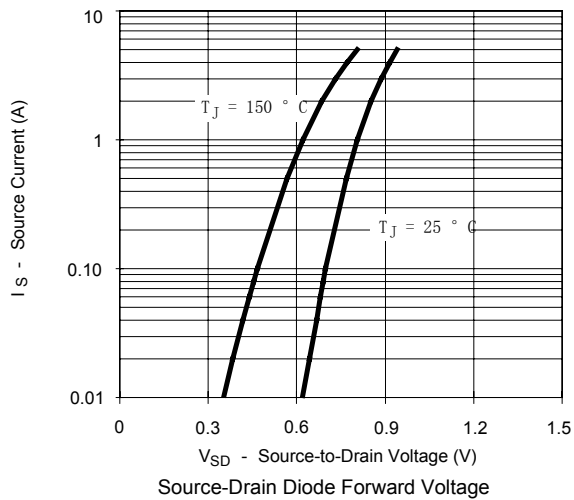
■ Typical Characteristics



P-Channel MOSFET

SI3475DV (KI3475DV)

Typical Characteristics



P-Channel MOSFET

SI3475DV (KI3475DV)

■ Typical Characteristics

