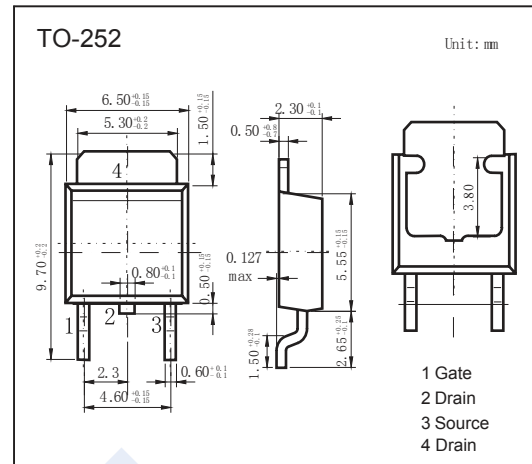
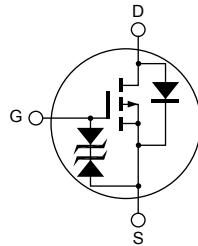


P-Channel MOSFET

2SJ506S

■ Features

- $V_{DS} (V) = -30V$
- $I_D = -10 A$
- $R_{DS(ON)} < 85m\Omega$ ($V_{GS} = -10V$)
- $R_{DS(ON)} < 180\Omega$ ($V_{GS} = -4V$)



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

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	-30	V
Gate-Source Voltage	V_{GS}	± 20	
Continuous Drain Current	I_D	-10	A
Pulsed Drain Current (Note.1)	I_{DM}	-40	
Body to Drain Diode Reverse Drain Current	I_{DR}	-10	
Power Dissipation	P_D	20	W
Junction Temperature	T_J	150	$^\circ C$
Junction Storage Temperature Range	T_{stg}	-55 to 150	

Note.1: $PW \leq 10 \mu s$, duty cycle $\leq 1\%$

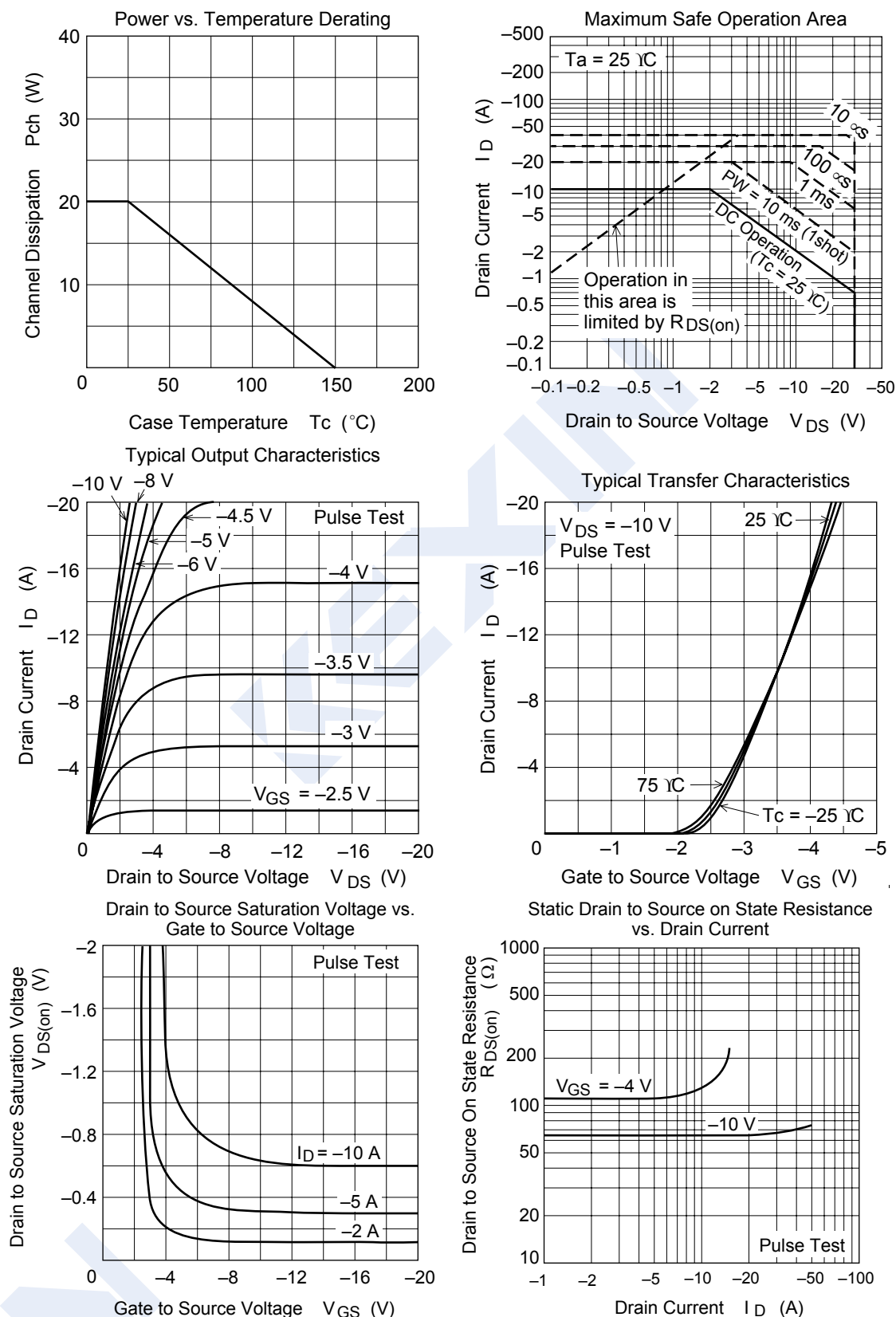
■ Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	V_{DSS}	$I_D = -10mA$, $V_{GS} = 0V$	-30			V
Gate-Source Breakdown Voltage	V_{GSS}	$I_G = \pm 100\mu A$, $V_{DS} = 0V$	± 20			
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS} = -30V$, $V_{GS} = 0V$			-10	μA
Gate-Body leakage current	I_{GSS}	$V_{DS} = 0V$, $V_{GS} = \pm 16V$			± 10	μA
Gate to Source Cutoff Voltage	$V_{GS(off)}$	$V_{GS} = -10V$, $I_D = -1mA$	-1		-2	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS} = -10V$, $I_D = -5A$			85	$m\Omega$
		$V_{GS} = -4V$, $I_D = -5A$			180	
Forward Transconductance	g_{FS}	$V_{DS} = -10V$, $I_D = -5A$	10	16		S
Input Capacitance	C_{iss}	$V_{GS} = 0V$, $V_{DS} = -10V$, $f = 1MHz$		660		pF
Output Capacitance	C_{oss}			440		
Reverse Transfer Capacitance	C_{rss}			140		
Turn-On DelayTime	$t_{d(on)}$	$V_{GS} = -10V$, $I_D = -5A$, $R_L = 2\Omega$		12		ns
Turn-On Rise Time	t_r			65		
Turn-Off DelayTime	$t_{d(off)}$			85		
Turn-Off Fall Time	t_f			65		
Body Diode Reverse Recovery Time	t_{rr}	$I_F = -10A$, $dI/dt = 50A/\mu s$, $V_{GS} = 0$		65		
Diode Forward Voltage	V_{SD}	$I_S = -10A$, $V_{GS} = 0V$		-1.05		V

P-Channel MOSFET

2SJ506S

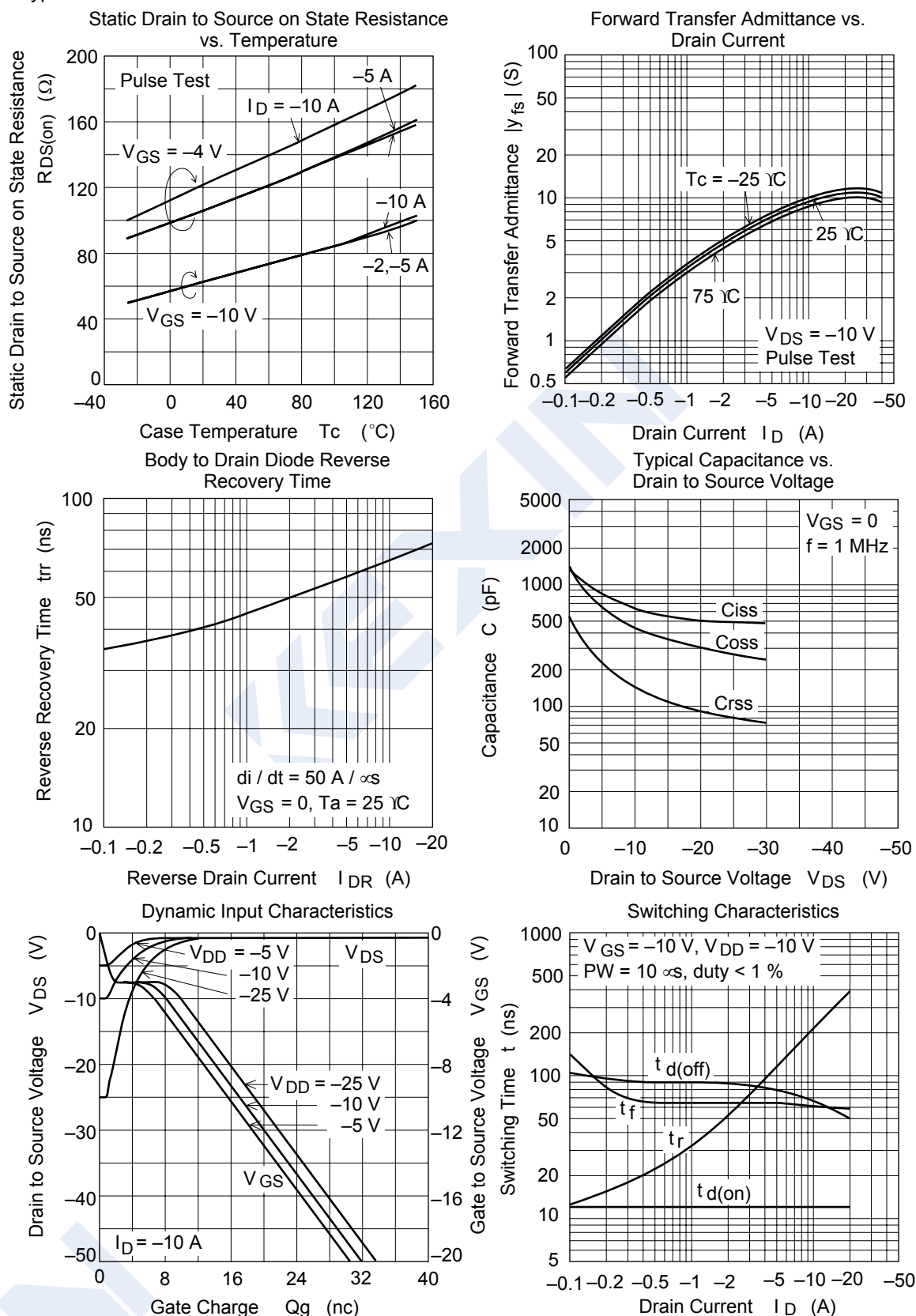
■ Typical Characteristics



P-Channel MOSFET

2SJ506S

■ Typical Characteristics



P-Channel MOSFET

2SJ506S

■ Typical Characteristics

