Specifications

Absolute Maximum Ratings at Ta = 25˚C

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V_{DSS}		–60	V
Gate-to-Source Voltage	V_{GSS}		±15	V
Drain Current (DC)	I_D		–18	A
Drain Current (Pulse)	I_{DP}	PW≤10μs, duty cycle≤1%	–72	A
Allowable Power Dissipation	P_D		1.65	W
		Tc=25°C	70	W
Channel Temperature	Tch		150	˚C
Storage Temperature	Tstg		–55 to +150	˚C

Electrical Characteristics at Ta = 25˚C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Drain-to-Source Breakdown Voltage	$V_{(BR)DSS}$	I_D=–1mA, V_{GS}=0	–60			V
Gate-to-Source Breakdown Voltage	$V_{(BR)GSS}$	I_G=±100μA, V_{DS}=0	±15			V
Zero-Gate Voltage Drain Current	I_{DSS}	V_{DS}=–60V, V_{GS}=0			–100	μA
Gate-to-Source Leakage Current	I_{GSS}	V_{GS}=±12V, V_{DS}=0			±10	μA
Cutoff Voltage	$V_{GS(off)}$	V_{DS}=–10V, I_D=–1mA	–1.0		–2.0	V
Forward Transfer Admittance	| yfs |	V_{DS}=–10V, I_D=–9A	8	13.5		S
Static Drain-to-Source ON-State Resistance	$R_{DS(on)}$	I_D=–9A, V_{GS}=–10V		60	80	mΩ
	$R_{DS(on)}$	I_D=–9A, V_{GS}=–4V		80	110	mΩ
Input Capacitance	Ciss	V_{DS}=–20V, f=1MHz		1900		pF
Output Capacitance	Coss	V_{DS}=–20V, f=1MHz		600		pF
Reverse Transfer Capacitance	Crss	V_{DS}=–20V, f=1MHz		150		pF
Turn-ON Delay Time	$t_{d(on)}$	See specified Test Circuit		18		ns
Rise Time	t_r	See specified Test Circuit		35		ns
Turn-OFF Delay Time	$t_{d(off)}$	See specified Test Circuit		350		ns
Fall Time	t_f	See specified Test Circuit		250		ns
Diode Forward Voltage	V_{SD}	I_S=–18A, V_{GS}=0		–1.0	–1.5	V

Switching Time Test Circuit