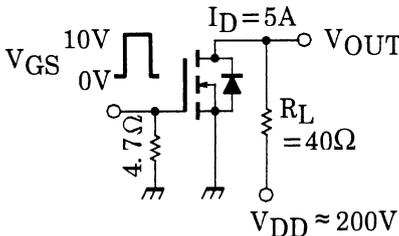


Electrical Characteristics (Ta = 25°C)

Characteristics		Symbol	Test Condition	Min	Typ.	Max	Unit
Gate leakage current		I_{GSS}	$V_{GS} = \pm 25 \text{ V}, V_{DS} = 0 \text{ V}$	—	—	± 10	μA
Gate-source breakdown voltage		$V_{(BR)GSS}$	$I_G = \pm 10 \mu\text{A}, V_{DS} = 0 \text{ V}$	± 30	—	—	V
Drain cut-off current		I_{DSS}	$V_{DS} = 700 \text{ V}, V_{GS} = 0 \text{ V}$	—	—	100	μA
Drain-source breakdown voltage		$V_{(BR)DSS}$	$I_D = 10 \text{ mA}, V_{GS} = 0 \text{ V}$	700	—	—	V
Gate threshold voltage		V_{th}	$V_{DS} = 10 \text{ V}, I_D = 1 \text{ mA}$	2.0	—	4.0	V
Drain-source ON resistance		$R_{DS(ON)}$	$V_{GS} = 10 \text{ V}, I_D = 5 \text{ A}$	—	0.72	1.0	Ω
Forward transfer admittance		$ Y_{fs} $	$V_{DS} = 10 \text{ V}, I_D = 5 \text{ A}$	4.0	7.0	—	S
Input capacitance		C_{iss}	$V_{DS} = 25 \text{ V}, V_{GS} = 0 \text{ V}, f = 1 \text{ MHz}$	—	1700	—	pF
Reverse transfer capacitance		C_{rss}		—	40	—	
Output capacitance		C_{oss}		—	200	—	
Switching time	Rise time	t_r		—	40	—	ns
	Turn-on time	t_{on}		—	72	—	
	Fall time	t_f		—	42	—	
	Turn-off time	t_{off}		Duty $\leq 1\%$, $t_w = 10\mu\text{s}$	—	145	
Total gate charge (Gate-source plus gate-drain)		Q_g	$V_{DD} \approx 400 \text{ V}, V_{GS} = 10 \text{ V}, I_D = 10 \text{ A}$	—	53	—	nC
Gate-source charge		Q_{gs}		—	25	—	
Gate-drain ("miller") charge		Q_{gd}		—	28	—	

Source-Drain Ratings and Characteristics (Ta = 25°C)

Characteristics	Symbol	Test Condition	Min	Typ.	Max	Unit
Continuous drain reverse current (Note 1)	I_{DR}	—	—	—	10	A
Pulse drain reverse current (Note 1)	I_{DRP}	—	—	—	30	A
Forward voltage (diode)	V_{DSF}	$I_{DR} = 10 \text{ A}, V_{GS} = 0 \text{ V}$	—	—	-1.9	V
Reverse recovery time	t_{rr}	$I_{DR} = 10 \text{ A}, V_{GS} = 0 \text{ V}$	—	1400	—	ns
Reverse recovery charge	Q_{rr}	$dI_{DR} / dt = 100 \text{ A} / \mu\text{s}$	—	17.5	—	μC

Marking

