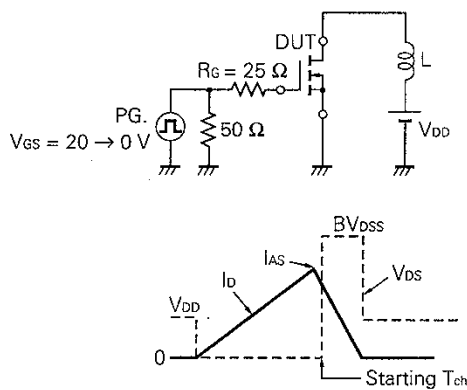


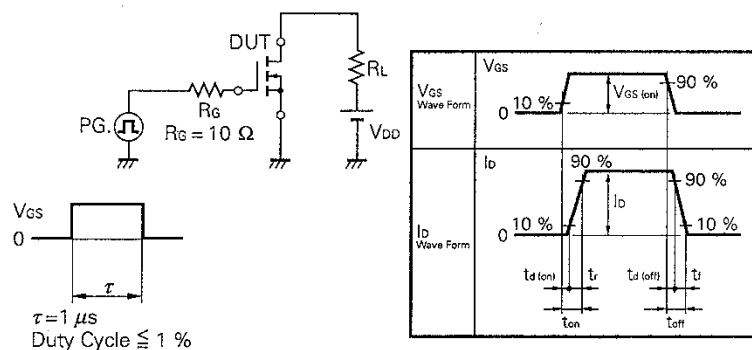
ELECTRICAL CHARACTERISTICS ($T_a = 25\text{ }^{\circ}\text{C}$)

CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
Drain to Source On-state Resistance	$R_{DS(on)}$		0.3	0.4	Ω	$V_{GS} = 10\text{ V}$, $I_D = 7.0\text{ A}$
Gate to Source Cutoff Voltage	$V_{GS(off)}$	2.0		4.0	V	$V_{DS} = 10\text{ V}$, $I_D = 1\text{ mA}$
Forward Transfer Admittance	$ y_{fs} $	2.0			S	$V_{DS} = 10\text{ V}$, $I_D = 7.0\text{ A}$
Drain Leakage Current	I_{DSS}			100	μA	$V_{DS} = 200\text{ V}$, $V_{GS} = 0$
Gate to Source Leakage Current	I_{GSS}			± 100	nA	$V_{GS} = \pm 30\text{ V}$, $V_{DS} = 0$
Input Capacitance	C_{iss}		500		pF	$V_{DS} = 10\text{ V}$ $V_{GS} = 0$ $f = 1\text{ MHz}$
Output Capacitance	C_{oss}		230		pF	
Reverse Transfer Capacitance	C_{rss}		60		pF	
Turn-On Delay Time	$t_d(on)$		12		ns	$V_{GS} = 10\text{ V}$ $V_{DD} = 100\text{ V}$ $I_D = 7.0\text{ A}$, $R_G = 10\text{ }\Omega$ $R_L = 14.3\text{ }\Omega$
Rise Time	t_r		45		ns	
Turn-Off Delay Time	$t_d(off)$		35		ns	
Fall Time	t_f		12		ns	
Total Gate Charge	Q_G		15		nC	$V_{GS} = -10\text{ V}$ $I_D = 13\text{ A}$ $V_{DD} = 160\text{ V}$
Gate to Source Charge	Q_{GS}		5.0		nC	
Gate to Drain Charge	Q_{GD}		8.0		nC	
Diode Forward Voltage	$V_{F(S-D)}$		1.0		V	$I_F = 13\text{ A}$, $V_{GS} = 0$
Reverse Recovery Time	t_{rr}		200		ns	$I_F = 13\text{ A}$ $di/dt = 50\text{ A}/\mu\text{s}$
Reverse Recovery Charge	Q_{rr}		0.6		μC	

Test Circuit 1 : Avalanche Capability



Test Circuit 2 : Switching Time



Test Circuit 3 : Gate Charge

