

Absolute Maximum Ratings (Ta = 25°C)

Symbol	Ratings	Unit
V_{DS}	600	V
V_{GS}	± 30	V
I_D	± 7	A
I_D (pulse) *1	± 28	A
P_D	40 (Tc = 25°C)	W
E_{AS} *2	150	mJ
I_{AS}	7	A
Tch	150	°C
Tstg	-55 to +150	°C

*1: $P_W \leq 100\mu s$, duty cycle $\leq 1\%$

*2: $V_{DD} = 30V$, $L = 6mH$, $I_L = 7A$, unclamped, $R_G = 50\Omega$,
See Figure 1 on Page 5.

Electrical Characteristics (Ta = 25°C)

Symbol	Ratings			Unit	Conditions
	min	typ	max		
$V_{(BR) DSS}$	600			V	$I_D = 100\mu A$, $V_{GS} = 0V$
I_{GSS}			± 100	nA	$V_{GS} = \pm 30V$
I_{DSS}			100	μA	$V_{DS} = 600V$, $V_{GS} = 0V$
V_{TH}	2.0	3.0	4.0	V	$V_{DS} = 10V$, $I_D = 1mA$
$R_{e (yfs)}$	4.0	6.0		S	$V_{DS} = 20V$, $I_D = 3.5A$
$R_{DS (on)}$		0.85	1.1	Ω	$V_{GS} = 10V$, $I_D = 3.5A$
C_{iss}		950		pF	$V_{DS} = 10V$, $f = 1.0MHz$, $V_{GS} = 0V$
C_{oss}		220		pF	
C_{rss}		120		pF	
$t_d (on)$		30		ns	$I_D = 3.5A$, $V_{DD} = 250V$, $R_L = 71\Omega$, $V_{GS} = 10V$, See Figure 2 on Page 5.
t_r		27		ns	
$t_d (off)$		100		ns	
t_f		50		ns	
V_{SD}		0.9	1.5	V	$I_{SD} = 7A$, $V_{GS} = 0V$

