

### Absolute Maximum Ratings (Ta = 25°C)

Symbol	Ratings	Unit
V <sub>DSS</sub>	100	V
V <sub>GSS</sub>	±20	V
I <sub>D</sub>	±12	A
I <sub>D</sub> (pulse) *1	±48	A
P <sub>D</sub>	30 (Tc = 25°C)	W
E <sub>AS</sub> *2	70	mJ
I <sub>AS</sub>	12	A
T <sub>ch</sub>	150	°C
T <sub>stg</sub>	-55 to +150	°C

\*1: Pw ≤ 100μs, duty cycle ≤ 1%  
 \*2: V<sub>DD</sub> = 25V, L = 730μH, I<sub>L</sub> = 12A, unclamped, R<sub>G</sub> = 50Ω, See Figure 1 on Page 5.

### Electrical Characteristics (Ta = 25°C)

Symbol	Ratings			Unit	Conditions
	min	typ	max		
V <sub>(BR) DSS</sub>	100			V	I <sub>D</sub> = 100μA, V <sub>GS</sub> = 0V
I <sub>GSS</sub>			±100	nA	V <sub>GS</sub> = ±20V
I <sub>DSS</sub>			100	μA	V <sub>DS</sub> = 100V, V <sub>GS</sub> = 0V
V <sub>TH</sub>	1.0		2.0	V	V <sub>DS</sub> = 10V, I <sub>D</sub> = 250μA
Re (yfs)	7	11		S	V <sub>DS</sub> = 10V, I <sub>D</sub> = 6A
R <sub>DS (on)</sub>		105	175	mΩ	V <sub>GS</sub> = 10V, I <sub>D</sub> = 6A
		130	220	mΩ	V <sub>GS</sub> = 4V, I <sub>D</sub> = 6A
C <sub>iss</sub>		740		pF	V <sub>DS</sub> = 10V, f = 1.0MHz, V <sub>GS</sub> = 0V
C <sub>oss</sub>		240		pF	
C <sub>rss</sub>		75		pF	
t <sub>d (on)</sub>		15		ns	I <sub>D</sub> = 6A, V <sub>DD</sub> = 50V, R <sub>L</sub> = 8.3Ω, V <sub>GS</sub> = 10V, See Figure 2 on Page 5.
t <sub>r</sub>		55		ns	
t <sub>d (off)</sub>		60		ns	
t <sub>f</sub>		20		ns	
V <sub>S</sub> D		1.0	1.5	V	I <sub>S</sub> D = 12A, V <sub>GS</sub> = 0V

