

### Absolute maximum ratings

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

Symbol	Ratings	Unit
$V_{DSS}$	150	V
$V_{GSS}$	+20, -10	V
$I_D$	$\pm 7A$	A
$I_D$ (pulse)	$\pm 15$ ( $PW \leq 1ms, Du \leq 1\%$ )	A
$E_{AS}^*$	100	mJ
$P_T$	5 ( $T_a=25^\circ\text{C}$ , with all circuits operating, without heatsink)	W
	35 ( $T_c=25^\circ\text{C}$ , with all circuits operating, with infinite heatsink)	W
$\theta_{j-a}$	25 (Junction-Air, $T_a=25^\circ\text{C}$ , with all circuits operating)	$^\circ\text{C/W}$
$\theta_{j-c}$	3.57 (Junction-Case, $T_c=25^\circ\text{C}$ , with all circuits operating)	$^\circ\text{C/W}$
$V_{ISO}$	1000 (Between fin and lead pin, AC)	$V_{rms}$
$T_{ch}$	150	$^\circ\text{C}$
$T_{stg}$	-40 to +150	$^\circ\text{C}$

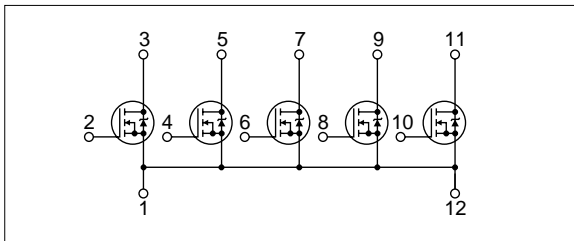
\* :  $V_{DD}=25V, L=3.4mH, I_D=7A$ , unclamped,  $R_G=50\Omega$ , see Fig. E on page 15.

### Electrical characteristics

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

Symbol	Specification			Unit	Conditions
	min	typ	max		
$V_{(BR)DSS}$	150			V	$I_D=100\mu A, V_{GS}=0V$
$I_{GSS}$			100	nA	$V_{GS}=20V$
$I_{DSS}$			100	$\mu A$	$V_{DS}=150V, V_{GS}=0V$
$V_{TH}$	1.0		2.0	V	$V_{DS}=10V, I_D=250\mu A$
$Re(yfs)$	4	9		S	$V_{DS}=10V, I_D=3.5A$
$R_{DS(ON)}$		150	200	$m\Omega$	$V_{GS}=10V, I_D=3.5A$
		170	230	$m\Omega$	$V_{GS}=4V, I_D=3.5A$
$C_{iss}$		870		pF	$V_{DS}=10V,$ $f=1.0MHz,$ $V_{GS}=0V$
$C_{oss}$		320		pF	
$C_{rss}$		210		pF	
$td(on)$		25		ns	$I_D=3.5A,$ $V_{DD} \approx 70V,$ $R_L=20\Omega,$ $V_{GS}=5V$ , see Fig. 3 in page 16.
$tr$		55		ns	
$td(off)$		80		ns	
$tf$		50		ns	
$V_{SD}$		1.0	1.5	V	$I_{SD}=7A, V_{GS}=0V$
$t_{rr}$		500		ns	$I_{SD}=\pm 100mA$

### Equivalent circuit diagram



### Characteristic curves

