

## Absolute maximum ratings

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

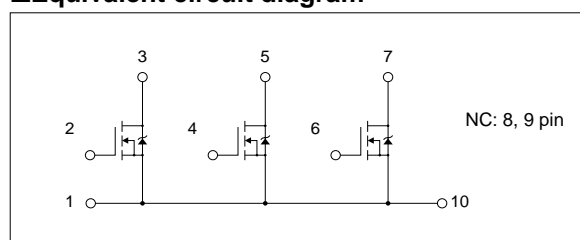
Symbol	Ratings	Unit
$V_{DSS}$	305	V
$V_{GSS}$	$\pm 20$	V
$I_D$	3	A
$I_{D(pulse)}$	6 ( $PW \leq 1\text{ms}$ , $D_u \leq 1\%$ )	A
$P_T$	3.5 ( $T_a=25^\circ\text{C}$ )	W
	15 ( $T_c=25^\circ\text{C}$ )	W
$\theta_{j-a}$	35.7 (with all circuits operating)	$^\circ\text{C/W}$
$\theta_{j-c}$	8.33 (with all circuits operating)	$^\circ\text{C/W}$
Tch	150	$^\circ\text{C}$
Tstg	-40 to +150	$^\circ\text{C}$

## Electrical characteristics

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

Symbol	Specification			Unit	Conditions
	min	typ	max		
$V_{(BR)DSS}$	305			V	$I_D=100\mu\text{A}$ , $V_{GS}=0\text{V}$
$I_{GSS}$			$\pm 100$	nA	$V_{GS}=\pm 20\text{V}$
$I_{DSS}$			100	$\mu\text{A}$	$V_{DS}=350\text{V}$ , $V_{GS}=0\text{V}$
$V_{TH}$	2.0		4.0	V	$V_{DS}=10\text{V}$ , $I_D=1\text{mA}$
$R_{e(yfs)}$		2.5		S	$V_{DS}=10\text{V}$ , $I_D=1.5\text{A}$
$R_{DS(ON)}$		1.4	1.8	$\Omega$	$V_{GS}=10\text{V}$ , $I_D=1.5\text{A}$
$C_{iss}$		240		pF	$V_{DS}=10\text{V}$ , $f=1.0\text{MHz}$ , $V_{GS}=0\text{V}$
$C_{oss}$		120		pF	
$C_{rss}$		50		pF	
$t_{d(on)}$		10		ns	$I_D=3\text{A}$ , $V_{DD} \div 100\text{V}$ , $R_L=33.3\Omega$ , $V_{GS}=10\text{V}$ , $R_{GS}=50\Omega$ see Fig. 3 on page 16.
$t_r$		30		ns	
$t_{d(off)}$		35		ns	
$t_f$		20		ns	
$V_{SD}$		1.1		V	

## Equivalent circuit diagram



## Characteristic curves