

Absolute maximum ratings

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

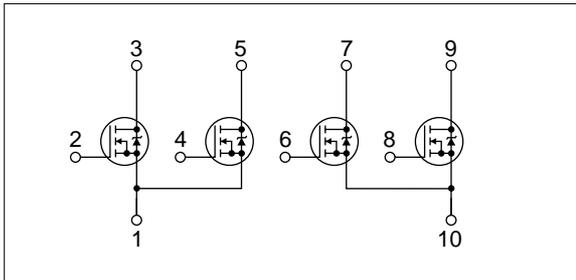
Symbol	Ratings	Unit
V_{DSS}	60	V
V_{GSS}	± 10	V
I_D	± 5	A
$I_{D(\text{pulse})}$	± 20 ($PW \leq 100\mu\text{s}$, $D_u \leq 1\%$)	A
P_T	4 ($T_a=25^\circ\text{C}$)	W
	20 ($T_c=25^\circ\text{C}$)	W
T_{ch}	150	$^\circ\text{C}$
T_{stg}	-40 to +150	$^\circ\text{C}$

Electrical characteristics

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

Symbol	Specification			Unit	Conditions
	min	typ	max		
$V_{(BR)DSS}$	60			V	$I_D=250\mu\text{A}$, $V_{GS}=0\text{V}$
I_{GSS}			± 500	nA	$V_{GS}=\pm 10\text{V}$
I_{DSS}			250	μA	$V_{DS}=60\text{V}$, $V_{GS}=0\text{V}$
V_{TH}	1.0		2.0	V	$V_{DS}=10\text{V}$, $I_D=250\mu\text{A}$
$R_{e(yfs)}$	2.0			S	$V_{DS}=10\text{V}$, $I_D=2.5\text{A}$
$R_{DS(ON)}$		0.15	0.20	Ω	$V_{GS}=10\text{V}$, $I_D=2.5\text{A}$
		0.23	0.28	Ω	$V_{GS}=4\text{V}$, $I_D=2.5\text{A}$
C_{iss}		400		pF	$V_{DS}=25\text{V}$,
C_{oss}		160		pF	$f=1.0\text{MHz}$,
C_{rSS}		35		pF	$V_{GS}=0\text{V}$
$t_{d(on)}$		20		ns	$I_D=2.5\text{A}$, $V_{DD} \doteq 30\text{V}$, $R_L=12\Omega$, $V_{GS}=5\text{V}$, see Fig. 3 on page 16.
t_r		25		ns	
$t_{d(off)}$		40		ns	
t_f		20		ns	
V_{SD}		1.0	1.5	V	
t_{rr}		150		ns	$I_{SD}=\pm 100\text{mA}$

Equivalent circuit diagram



Characteristic curves