

Absolute maximum ratings

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

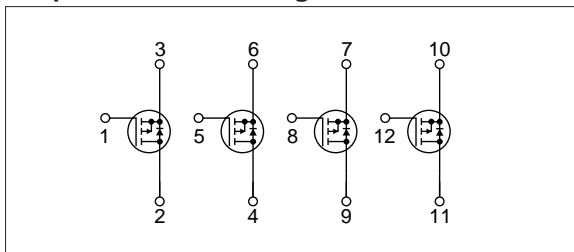
Symbol	Ratings	Unit
V_{DSS}	-100	V
V_{GSS}	± 20	V
I_D	± 5	A
$I_{D(\text{pulse})}$	± 10 ($PW \leq 1\text{ms}$)	A
P_T	5 ($T_a=25^\circ\text{C}$, with all circuits operating, without heatsink)	W
	35 ($T_c=25^\circ\text{C}$, with all circuits operating, with infinite heatsink)	W
θ_{j-a}	25 (Junction-Air,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

Electrical characteristics

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

Symbol	Specifications			Unit	Condition
	min	typ	max		
$V_{(BR)DSS}$	-100			V	$I_D=-250\mu\text{A}$, $V_{GS}=0\text{V}$
I_{GSS}			± 500	nA	$V_{GS}=\pm 20\text{V}$
I_{DSS}			-250	μA	$V_{DS}=-100\text{V}$, $V_{GS}=0\text{V}$
V_{TH}	-2.0		-4.0	V	$V_{DS}=-10\text{V}$, $I_D=-250\mu\text{A}$
$R_{e(yfs)}$	0.9	2.0		S	$V_{DS}=-10\text{V}$, $I_D=-5\text{A}$
$R_{DS(ON)}$		0.55	0.7	Ω	$V_{GS}=-10\text{V}$, $I_D=-5\text{A}$
C_{ISS}		300		pF	$V_{DS}=-25\text{V}$, $f=1.0\text{MHz}$, $V_{GS}=0\text{V}$
C_{OSS}		200		pF	
t_{on}		150		ns	$I_D=-5\text{A}$, $V_{DD}=-50\text{V}$, $V_{GS}=-10\text{V}$, see Fig. 4 on page 16.
t_{off}		200		ns	
V_{SD}		-4.5	-5.5	V	$I_{SD}=-5\text{A}$, $V_{GS}=0\text{V}$
t_{rr}		220		ns	$I_{SD}=\pm 100\text{mA}$

Equivalent circuit diagram



Characteristic curves

