

Absolute maximum ratings

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

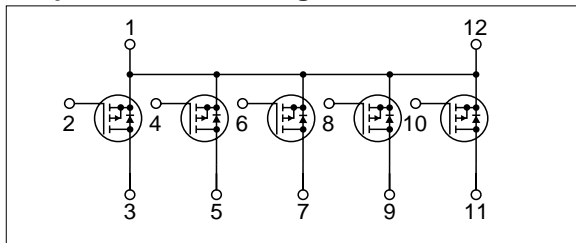
Symbol	Ratings	Unit
V_{DSS}	-60	V
V_{GSS}	± 20	V
I_D	-5	A
$I_D(\text{pulse})$	-10 ($PW \leq 1\text{ms}$, $\text{duty} \leq 25\%$)	A
P_T	5 ($T_a=25^\circ\text{C}$, with all circuits operating, without heatsink)	W
	30 ($T_c=25^\circ\text{C}$, with all circuits operating, with infinite heatsink)	
θ_{j-a}	25 (Junction-Air, $T_a=25^\circ\text{C}$, with all circuits operating)	$^\circ\text{C/W}$
θ_{j-c}	4.17 (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	$^\circ\text{C}$

Electrical characteristics

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

Symbol	Specification			Unit	Conditions
	min	typ	max		
$V_{(BR)DSS}$	-60			V	$I_D = -100\mu\text{A}$, $V_{GS} = 0\text{V}$
I_{GSS}			± 100	nA	$V_{GS} = \pm 20\text{V}$
I_{DSS}			-100	μA	$V_{DS} = -60\text{V}$, $V_{GS} = 0\text{V}$
V_{TH}	-1.0		-2.0	V	$V_{DS} = -10\text{V}$, $I_D = -250\mu\text{A}$
$R_{e(yfs)}$	4	6		S	$V_{DS} = -10\text{V}$, $I_D = -3\text{A}$
$R_{DS(ON)}$		0.14	0.22	Ω	$V_{GS} = -10\text{V}$, $I_D = -3\text{A}$
C_{iss}		790		pF	$V_{DS} = -10\text{V}$, $f = 1.0\text{MHz}$, $V_{GS} = 0\text{V}$
C_{oss}		310		pF	
C_{rss}		90		pF	
$t_{d(on)}$		40		ns	$I_D = -3\text{A}$, $V_{DD} = -20\text{V}$, $R_L = 6.67\Omega$, $V_{GS} = -5\text{V}$, see Fig. 4 on page 16.
t_r		110		ns	
$t_{d(off)}$		160		ns	
t_f		80		ns	
V_{SD}	-1.0	-1.5		V	
t_{rr}		85		ns	$I_{SD} = 3\text{A}$, $V_{GS} = 0\text{V}$, $di/dt = 100\text{A}/\mu\text{s}$

Equivalent circuit diagram



Characteristic curves

