

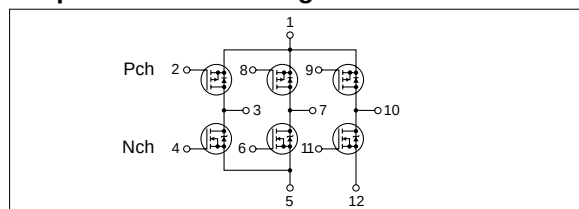
Absolute maximum ratings

(Ta=25°C)

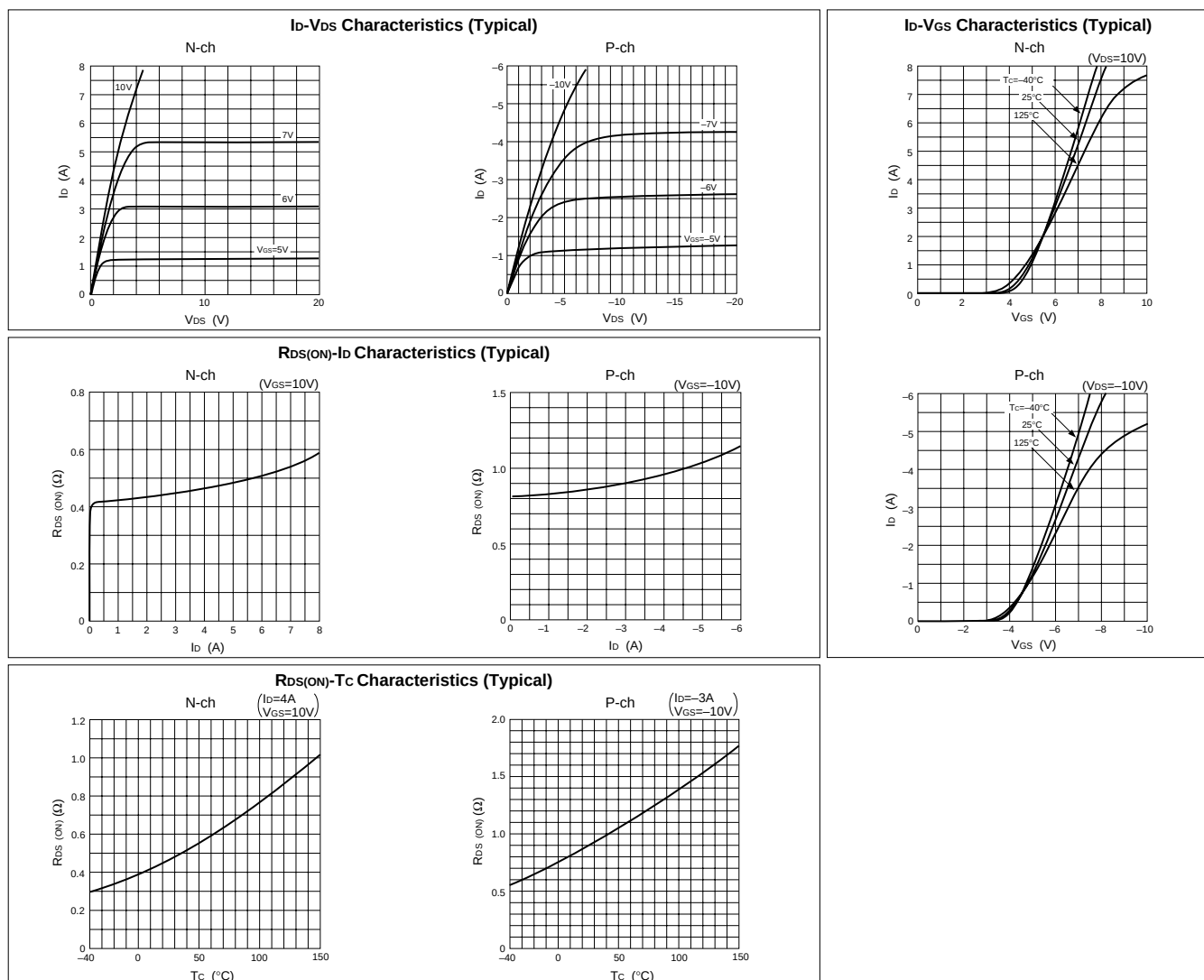
Symbol	Ratings		Unit
	N channel	P channel	
V _{DS}	100	-100	V
V _{GS}	±20	±20	V
I _D	±4	±3	A
I _{D(pulse)}	±8 (PW≤1ms)	±6 (PW≤1ms)	A
E _{AS} *	16	—	mJ
P _T	5 (Ta=25°C, with all circuits operating, without heatsink)		W
	35 (Tc=25°C, with all circuits operating, with infinite heatsink)		W
θ _{j-a}	25 (Junction-Air, Ta=25°C, with all circuits operating)		°C/W
θ _{j-c}	3.57 (Junction-Case, Tc=25°C, with all circuits operating)		°C/W
V _{ISO}	1000 (Between fin and lead pin, AC)		Vrms
T _{ch}	150		°C
T _{stg}	-40 to +150		°C

* : V_{DD}=20V, L=1mH, I_D=5A, unclamped, see Fig. E on page 15.

Equivalent circuit diagram



Characteristic curves



Electrical characteristics

(Ta=25°C)

Symbol	N channel					P channel				
	Specification			Unit	Conditions	Specification			Unit	Conditions
	min	typ	max			min	typ	max		
$V_{(BR)DSS}$	100			V	$I_D=250\mu A, V_{GS}=0V$	-100			V	$I_D=-250\mu A, V_{GS}=0V$
I_{GSS}			± 500	nA	$V_{GS}=\pm 20V$			∓ 500	nA	$V_{GS}=\mp 20V$
I_{DSS}			250	μA	$V_{DS}=100V, V_{GS}=0V$			-250	μA	$V_{DS}=-100V, V_{GS}=0V$
V_{TH}	2.0		4.0	V	$V_{DS}=10V, I_D=250\mu A$	-2.0		-4.0	V	$V_{DS}=-10V, I_D=-250\mu A$
$R_{e(yfs)}$	1.1	1.7		S	$V_{DS}=10V, I_D=4A$	0.7	1.1		S	$V_{DS}=-10V, I_D=-3A$
$R_{DS(ON)}$		0.50	0.60	Ω	$V_{GS}=10V, I_D=4A$		1.1	1.3	Ω	$V_{GS}=-10V, I_D=-3A$
C_{iss}		180		pF	$V_{DS}=25V, f=1.0MHz,$ $V_{GS}=0V$		180		pF	$V_{DS}=-25V, f=1.0MHz,$ $V_{GS}=0V$
C_{oss}		82		pF			85		pF	
t_{on}		40		ns	$I_D=4A, V_{DD}\div 50V, V_{GS}=10V,$		90		ns	$I_D=-3A, V_{DD}\div -50V, V_{GS}=-10V,$
t_{off}		40		ns	see Fig. 3 on page 16.		80		ns	see Fig. 4 on page 16.
V_{SD}		1.2	2.0	V	$I_{SD}=4A, V_{GS}=0V$		-4.0	-5.5	V	$I_{SD}=-3A$
t_{rr}		250		ns	$I_{SD}=\pm 100mA$		250		ns	$I_{SD}=\mp 100mA$

Characteristic curves

