

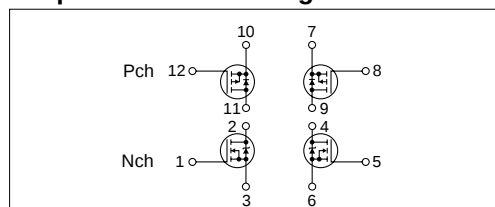
Absolute maximum ratings

(Ta=25°C)

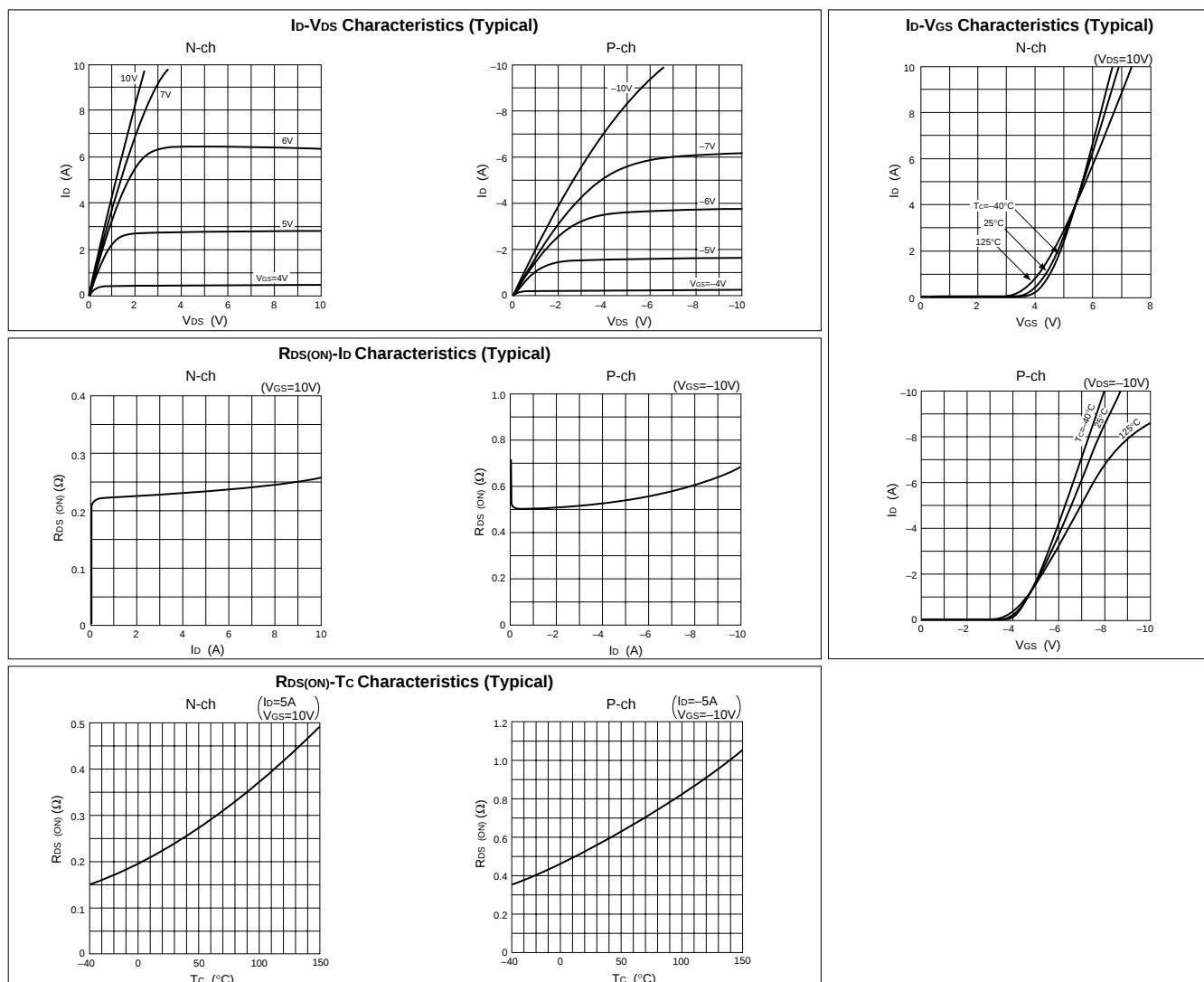
Symbol	Ratings		Unit
	N channel	P channel	
V _{DSS}	100	-100	V
V _{GSS}	±20	±20	V
I _D	±5	±5	A
I _{D(pulse)}	±10 (PW≤1ms)	±10 (PW≤1ms)	A
E _{AS} *	30	—	mJ
P _T	5 (Ta=25°C, with all circuits operating, without heatsink)		W
	35 (Tc=25°C, with all circuits operating, with infinite heatsink)		W
θ _{j-a}	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=10mH, I_D=2.5A, 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 =250μA, V _{GS} =0V	-100			V	I _D =-250μA, V _{GS} =0V
I _{GSS}			±500	nA	V _{GS} =±20V			±500	nA	V _{GS} =±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 =250μA	-2.0		-4.0	V	V _{DS} =-10V, I _D =-250μA
Re _(yfs)	2.4	3.7		S	V _{DS} =10V, I _D =5A	0.9	2.0		S	V _{DS} =-10V, I _D =-5A
R _{DS(ON)}		0.27	0.30	Ω	V _{GS} =10V, I _D =5A		0.55	0.7	Ω	V _{GS} =-10V, I _D =-5A
C _{iss}		350		pF	V _{DS} =25V, f=1.0MHz,		300		pF	V _{DS} =-25V, f=1.0MHz,
C _{oss}		130		pF	V _{GS} =0V		200		pF	V _{GS} =0V
t _{on}		60		ns	I _D =5A, V _{DD} ÷50V, V _{GS} =10V,		150		ns	I _D =-5A, V _{DD} ÷-50V, V _{GS} =-10V,
t _{off}		40		ns	see Fig. 3 on page 16.		200		ns	see Fig. 4 on page 16.
V _{SD}		1.1	1.8	V	I _{SD} =5A, V _{GS} =0V		-4.5	-5.5	V	I _{SD} =-5A, V _{GS} =0V
t _{rr}		330		ns	I _{SD} =±100mA		220		ns	I _{SD} =±100mA

Characteristic curves

