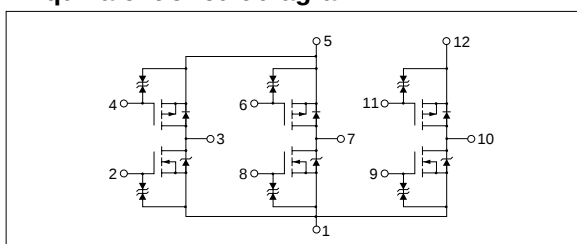


Absolute maximum ratings

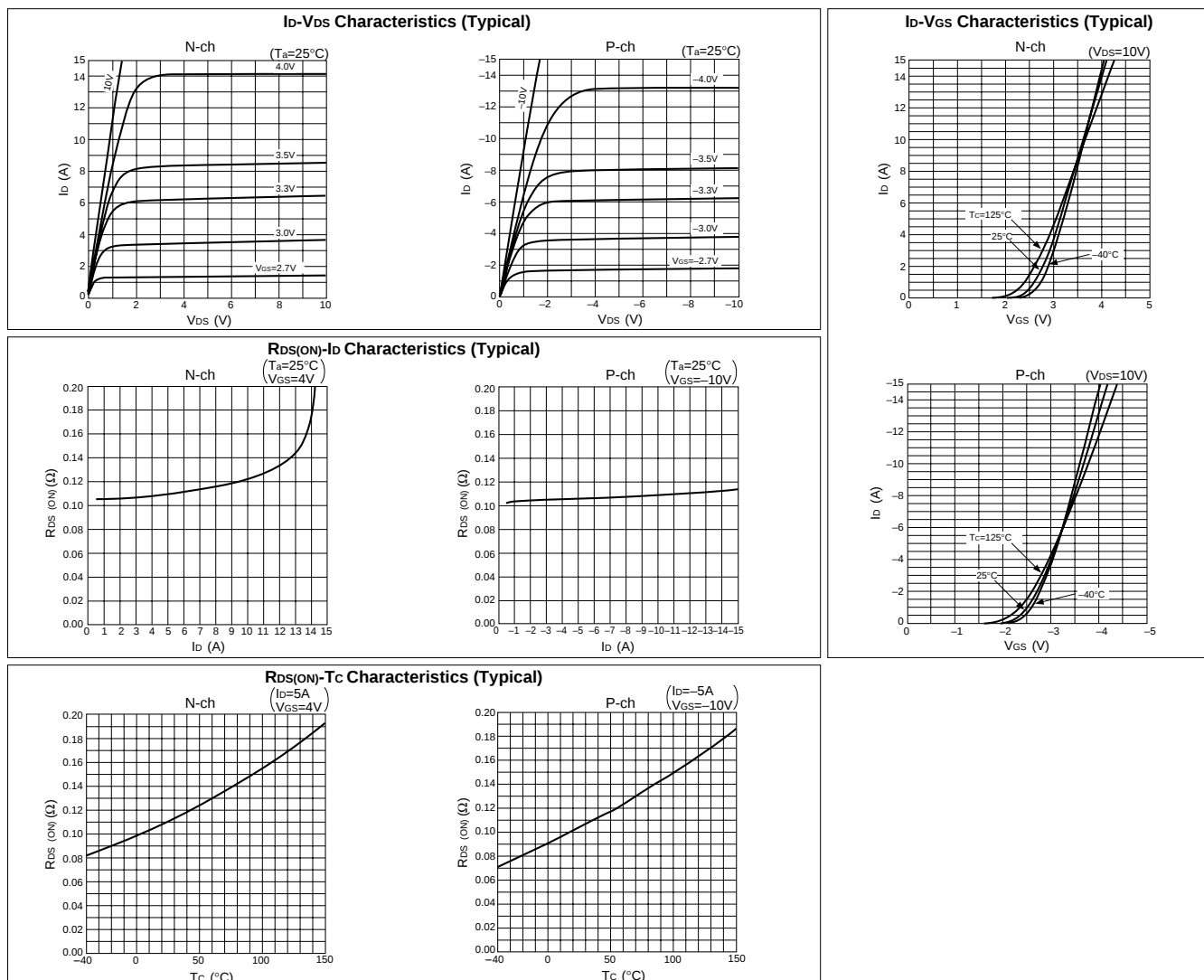
(Ta=25°C)

Symbol	Ratings		Unit
	N channel	P channel	
V _{DSS}	60	-60	V
V _{GSS}	±20	±20	V
I _D	10	-10	A
I _{D(pulse)}	15 (PW≤1ms, duty≤25%)	-15 (PW≤1ms, duty≤25%)	A
P _T	5 (Ta=25°C, with all circuits operating, without heatsink)		W
	40 (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}	3.125 (Junction-Case, Tc=25°C, with all circuits operating)		°C/W
V _{ISO}	1000 (Between fin and lead pin, AC)		V _{rms}
T _{ch}	150		°C
T _{stg}	-40 to +150		°C

■Equivalent circuit diagram



Characteristic curves



Electrical characteristics

(T_a=25°C)

Symbol	N channel					P channel				
	Specification			Unit	Conditions	Specification			Unit	Conditions
	min	typ	max			min	typ	max		
V _{(BR)DSS}	60			V	I _D =100μA, V _{GS} =0V	-60			V	I _D =-100μA, V _{GS} =0V
I _{GSS}			±10	μA	V _{GS} =±20V			±10	μA	V _{GS} =±20V
I _{DSS}			100	μA	V _{DS} =60V, V _{GS} =0V			-100	μA	V _{DS} =-60V, V _{GS} =0V
V _{TH}	1.0		2.0	V	V _{DS} =10V, I _D =250μA	-1.0		-2.0	V	V _{DS} =-10V, I _D =-250μA
Re _(yfs)		8		S	V _{DS} =10V, I _D =5A		8.7		S	V _{DS} =-10V, I _D =-5A
R _{DS(ON)}			0.14	Ω	V _{GS} =4V, I _D =5A			0.14	Ω	V _{GS} =-10V, I _D =-5A
C _{iss}		460		pF	V _{DS} =10V, f=1.0MHz, V _{GS} =0V		1200		pF	V _{DS} =-10V, f=1.0MHz, V _{GS} =0V
C _{oss}		225		pF			440		pF	
C _{rss}		50		pF			120		pF	
td _(on)		25		ns	I _D =5A, V _{DD} ≐20V, R _L =4Ω, V _{GS} =5V, see Fig. 3 on page 16.		50		ns	I _D =-5A, V _{DD} ≐20V, R _L =4Ω, V _{GS} =-5V, see Fig. 4 on page 16.
t _r		110		ns			170		ns	
td _(off)		90		ns			180		ns	
t _f		55		ns			100		ns	
V _{SD}		1.15		V	I _{SD} =10A, V _{GS} =0V		-1.25		V	I _{SD} =-10A, V _{GS} =0V
t _{rr}		75		ns	I _{SD} =5A, V _{GS} =0V, di/dt=100A/μs		100		ns	I _{SD} =-5A, V _{GS} =0V, di/dt=100A/μs

Characteristic curves

