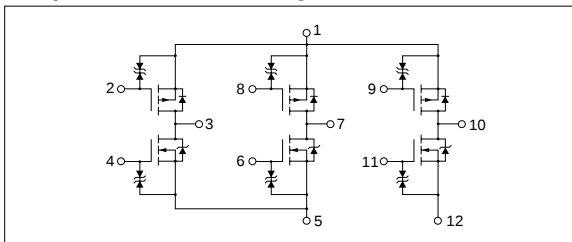


Absolute maximum ratings

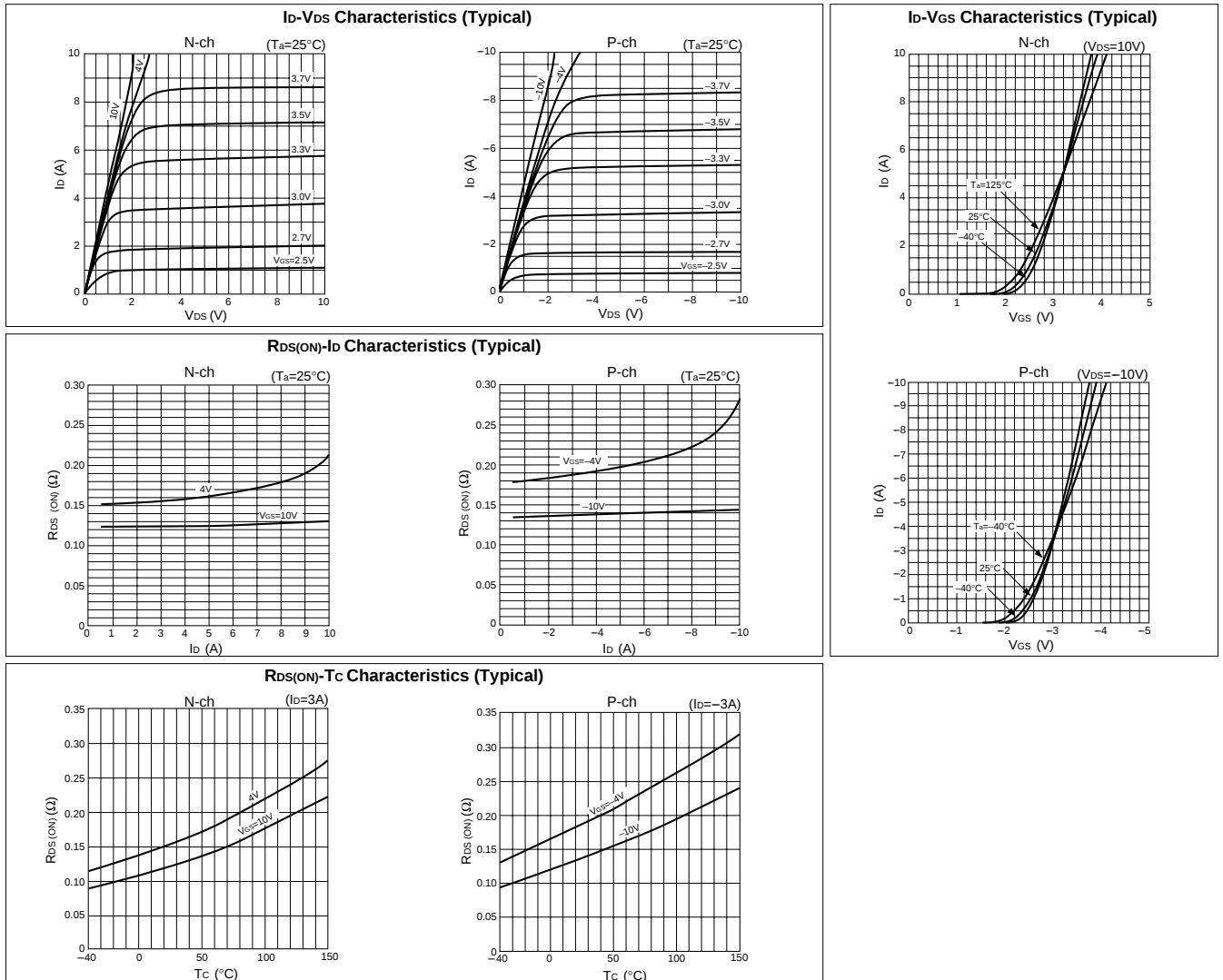
(Ta=25°C)

Symbol	Ratings		Unit
	N channel	P channel	
V _{DS}	60	-60	V
V _{GS}	±20	±20	V
I _D	6	-6	A
I _{D(pulse)}	10 (PW≤1ms, duty≤25%)	-10 (PW≤1ms, duty≤25%)	A
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)		V _{rms}
T _{ch}	150		°C
T _{stg}	-40 to +150		°C

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	60			V	$I_D=100\mu A$, $V_{GS}=0V$	-60			V	$I_D=-100\mu A$, $V_{GS}=0V$
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	$V_{DS}=10V$, $I_D=250\mu A$	-1.0		-2.0	V	$V_{DS}=-10V$, $I_D=-250\mu A$
Re(yfs)		5.5		S	$V_{DS}=10V$, $I_D=3A$		6		S	$V_{DS}=-10V$, $I_D=-3A$
R _{DS(ON)}			0.22	Ω	$V_{GS}=4V$, $I_D=3A$			0.22	Ω	$V_{GS}=-10V$, $I_D=-3A$
C _{iss}		320		pF	$V_{DS}=10V$, $f=1.0MHz$, $V_{GS}=0V$		790		pF	$V_{DS}=-10V$, $f=1.0MHz$, $V_{GS}=0V$
C _{oss}		160		pF			310		pF	
C _{rss}		35		pF			90		pF	
t _{d(on)}		16		ns	$I_D=3A$, $V_{DD}=20V$, $R_L=6.67\Omega$, $V_{GS}=5V$, see Fig. 3 on page 16.		40		ns	$I_D=-3A$, $V_{DD}=20V$, $R_L=6.67\Omega$, $V_{GS}=-5V$, see Fig. 4 on page 16.
t _r		65		ns			110		ns	
t _{d(off)}		70		ns			160		ns	
t _f		45		ns			80		ns	
V _{SD}		1.2		V	$I_{SD}=6A$, $V_{GS}=0V$		-1.1		V	$I_{SD}=-6A$, $V_{GS}=0V$
t _{rr}		65		ns	$I_{SD}=3A$, $V_{GS}=0V$, $di/dt=100A/\mu s$		85		ns	$I_{SD}=-3A$, $V_{GS}=0V$, $di/dt=100A/\mu s$

Characteristic curves

