### **Absolute maximum ratings**

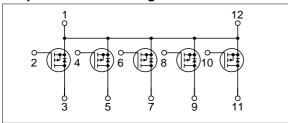
Absolute maximum ratings (Ta=25°C)					
Symbol	Ratings				
VDSS	-60	V			
Vgss	±20	V			
lo	<b>-</b> 5	Α			
I <sub>D</sub> (pulse)	-10 (PW≤1ms, duty≤25%)	Α			
Рт	5 (Ta=25°C, with all circuits operating, without heatsink)				
	30 (Tc=25°C,with all circuits operating, with infinite heatsink)	W			
hetaj-a	25 (Junction-Air, Ta=25°C, with all circuits operating)				
hetaj-c	4.17 (Junction-Case, Tc=25°C, with all circuits operating)				
Viso	1000 (Between fin and lead pin, AC)				
Tch	150	°C			
Tstg	-40 to +150	°C			

#### **Electrical characteristics**

(Ta=25°C)

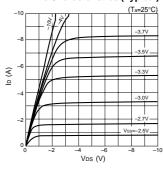
Cumbal	Specification		I Imia	Conditions		
Symbol	min	typ	max	Unit	Conditions	
V(BR)DSS	-60			V	ID=-100μA, VGS=0V	
Igss			±100	nA	Vgs=±20V	
IDSS			-100	μΑ	VDS=-60V, VGS=0V	
Vтн	-1.0		-2.0	V	VDS=-10V, ID=-250μA	
Re(yfs)	4	6		S	VDS=-10V, ID=-3A	
RDS(ON)		0.14	0.22	Ω	Vgs=-10V, ID=-3A	
Ciss		790		pF	VDS=-10V,	
Coss		310		pF	f=1.0MHz,	
Crss		90		pF	Vgs=0V	
td(on)		40		ns	ID=−3A, VDD≒−20V,	
tr		110		ns	RL= $6.67\Omega$ ,	
td(off)		160		ns	Vgs=-5V,	
tf		80		ns	see Fig. 4 on page 16.	
VsD		-1.0	-1.5	V	IsD=-5A, Vgs=0V	
trr		85		ns	IsD=3A, Vgs=0V, di/dt=100A/μs	

## **■**Equivalent circuit diagram

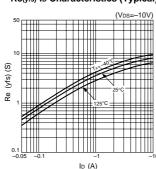


### Characteristic curves

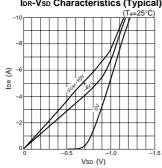
# ID-VDS Characteristics (Typical)



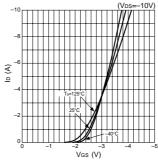
Re(yfs)-ID Characteristics (Typical)



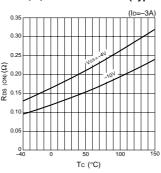
IDR-VSD Characteristics (Typical)



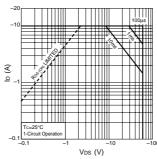
**ID-VGS Characteristics (Typical)** 



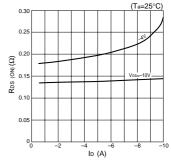
RDS(ON)-Tc Characteristics (Typical)



Safe Operating Area (SOA)



RDS(ON)-ID Characteristics (Typical)



Capacitance-Vos Characteristics (Typical)

