

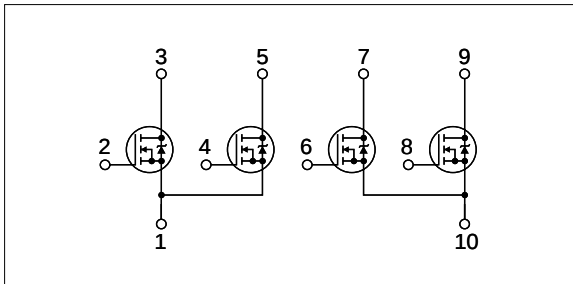
Absolute maximum ratings

(Ta=25°C)

Symbol	Ratings	Unit
V _{DSS}	100	V
V _{GSS}	±20	V
I _D	±2	A
I _D (pulse)	±5 (PW≤100μs, Du≤1%)	A
E _{AS} *	5.6	mJ
P _T	4 (Ta=25°C)	W
	20 (Tc=25°C)	W
T _{ch}	150	°C
T _{stg}	-40 to +150	°C

* : V_{DD}=25V, L=2.2mH, I_L=2A, unclamped, R_G=50Ω, see Fig. E on page 15.

Equivalent circuit diagram



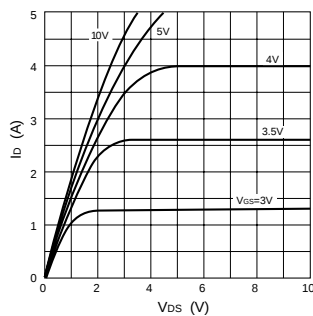
Electrical characteristics

(Ta=25°C)

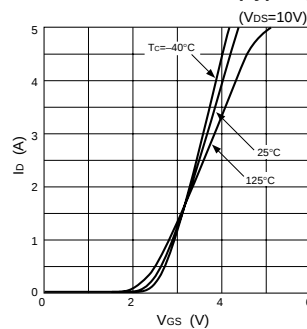
Symbol	Specification			Unit	Conditions
	min	typ	max		
V _{(BR)DSS}	100			V	I _D =100μA, V _{GS} =0V
I _{GSS}			±100	nA	V _{GS} =±20V
I _{DSS}			100	μA	V _{DS} =100V, V _{GS} =0V
V _{TH}	1.0		2.0	V	V _{DS} =10V, I _D =250μA
Re(yfs)	1.5	2.0		S	V _{DS} =10V, I _D =1A
R _{DS(ON)}		0.55	0.80	Ω	V _{GS} =10V, I _D =1A
		0.70	0.95	Ω	V _{GS} =4V, I _D =1A
C _{iss}		150		pF	V _{DS} =25V, f=1.0MHz,
C _{oss}		45		pF	V _{GS} =0V
C _{rss}		9		pF	V _{GS} =0V
t _{d(on)}		15		ns	I _D =1A, V _{DD} =50V, R _L =50Ω, V _{GS} =5V, see Fig. 3 on page 16.
t _r		30		ns	
t _{d(off)}		40		ns	
t _f		30		ns	
V _{SD}		1.0	1.5	V	I _{SD} =2A, V _{GS} =0V
t _{rr}		160		ns	I _{SD} =±100mA

Characteristic curves

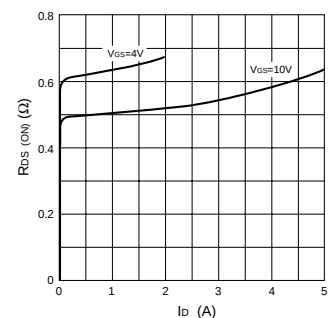
I_D-V_{DS} Characteristics (Typical)



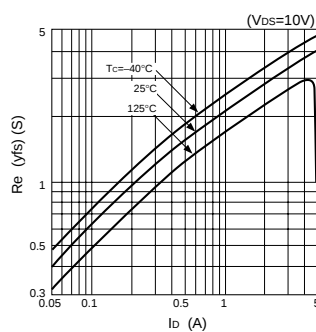
I_D-V_{GS} Characteristics (Typical)



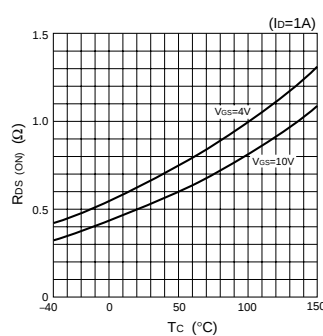
R_{DS(ON)}-I_D Characteristics (Typical)



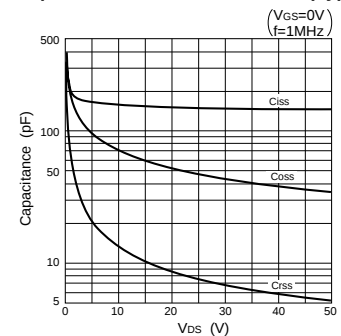
Re(yfs)-I_D Characteristics (Typical)



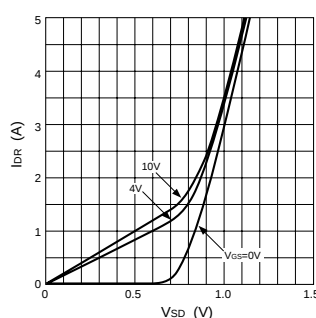
R_{DS(ON)}-T_C Characteristics (Typical)



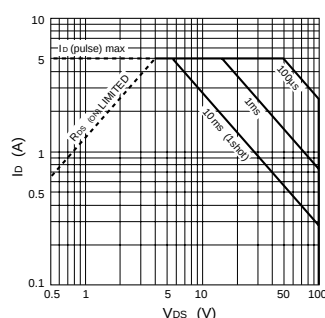
Capacitance-V_{DS} Characteristics (Typical)



I_{DR}-V_{SD} Characteristics (Typical)



P_T-T_a Characteristics



Safe Operating Area (SOA)

