

Absolute maximum ratings

(Ta=25°C)

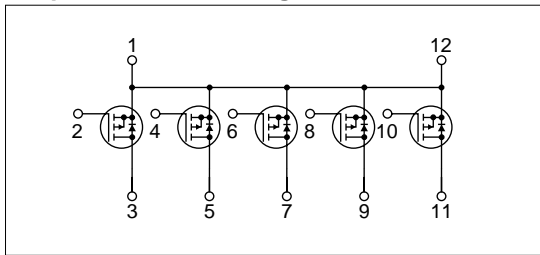
Symbol	Ratings	Unit
V _{DSS}	-60	V
V _{GSS}	±20	V
I _D	±4	A
I _{D(pulse)}	±8 (PW≤1ms)	A
P _T	5 (Ta=25°C, with all circuits operating, without heatsink)	W
	35 (Tc=25°C, with all circuits operating, with infinite heatsink)	W
θ _{j-a}	25 (Junction-Air, Ta=25°C, with all circuits operating)	°C/W
θ _{j-c}	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

Electrical characteristics

(Ta=25°C)

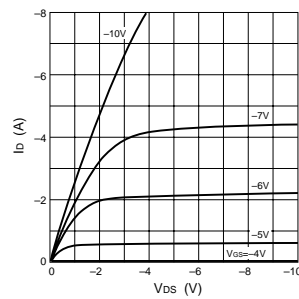
Symbol	Specification			Unit	Conditions
	min	typ	max		
V _{(BR)DSS}	-60			V	I _D =-250μA, V _{GS} =0V
I _{GSS}			±500	nA	V _{GS} =±20V
I _{DSS}			-250	μA	V _{DS} =-60V, V _{GS} =0V
V _{TH}	-2.0		-4.0	V	V _{DS} =-10V, I _D =-250μA
Re _(yfs)	1.6	2.2		S	V _{DS} =-10V, I _D =-4A
R _{DS(ON)}		0.38	0.55	Ω	V _{GS} =-10V, I _D =-4A
C _{iss}		270		pF	V _{DS} =-25V, f=1.0MHz,
C _{oss}		170		pF	V _{GS} =0V
ton		60		ns	I _D =-4A, V _{DD} =-30V, V _{GS} =-10V,
toff		60		ns	see Fig. 4 on page 16.
V _{SD}		-4.5	-5.5	V	I _{SD} =-4A
trr		150		ns	I _{SD} =±100mA

Equivalent circuit diagram

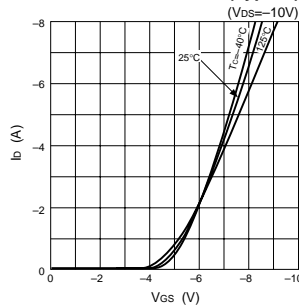


Characteristic curves

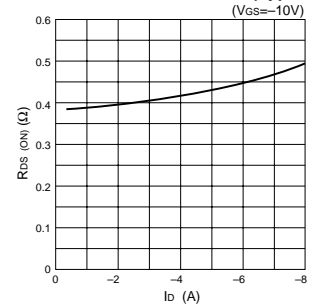
I_D-V_{DS} Characteristics (Typical)



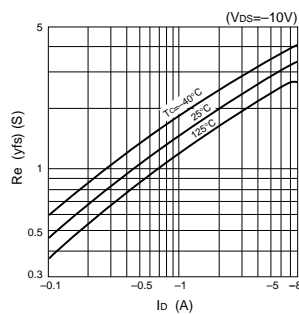
I_D-V_{GS} Characteristics (Typical)



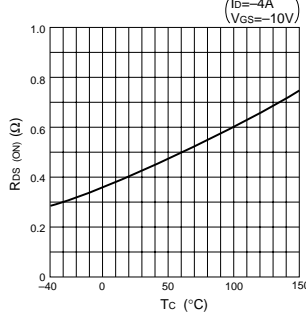
R_{DS(ON)}-I_D Characteristics (Typical)



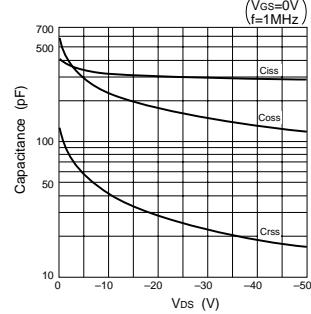
Re_(yfs)-I_D Characteristics (Typical)



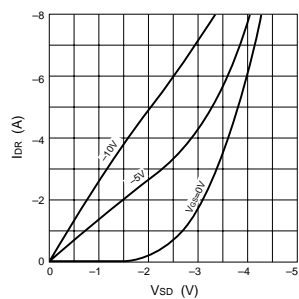
R_{DS(ON)}-T_c Characteristics (Typical)



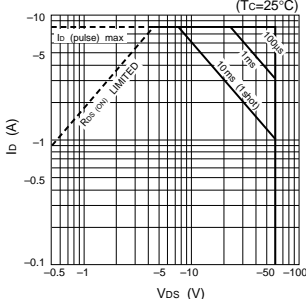
Capacitance-V_{DS} Characteristics (Typical)



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



Safe Operating Area (SOA)



P_T-T_a Characteristics

