Ordering number:EN5050

FX207

P-Channel Silicon MOSFET

Very High-Speed Switching Applications

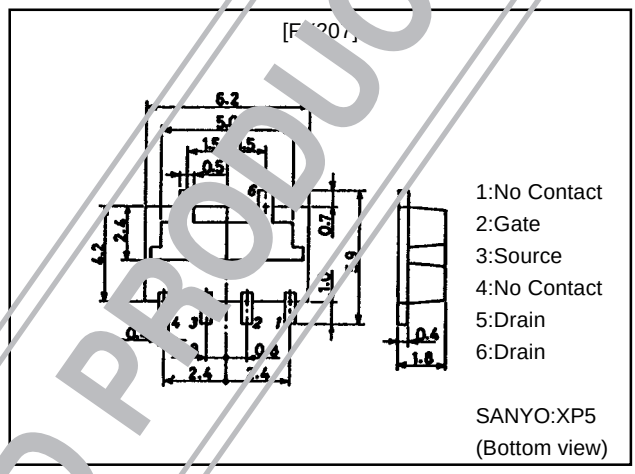
Features

- Low ON-resistance.
- Very high-speed switching.
- 2.5V drive.

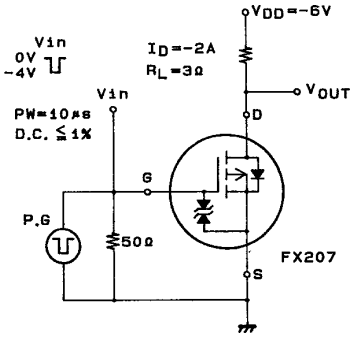
Package Dimensions

unit:mm

2121



Switching Time Test CIrcuit



Specifications

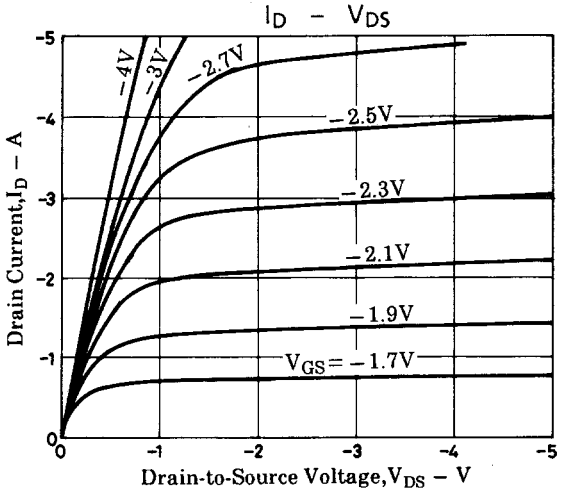
Absolute Maximum Ratings at Ta = 25˚C

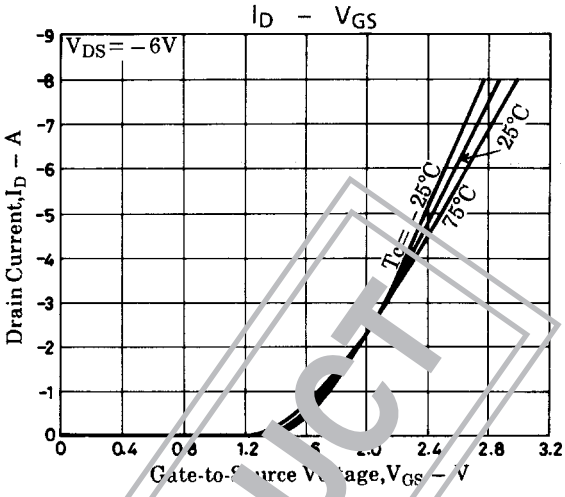
Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V_{DSS}		–12	V
Gate-to-Source Voltage	V_{GSS}		±10	V
Drain Current (DC)	I_D		–4	A
Drain Current (Pulse)	I_{DP}	PW≤10μs, duty cycle≤1%	–16	A
Allowable Power Dissipation	P_D	Tc=25˚C	8	W
	P_D	Mounted on ceramic board (750mm²×0.8mm)	2	W
Channel Temperature	Tch		150	˚C
Storage Temperature	Tstg		–55 to +150	˚C

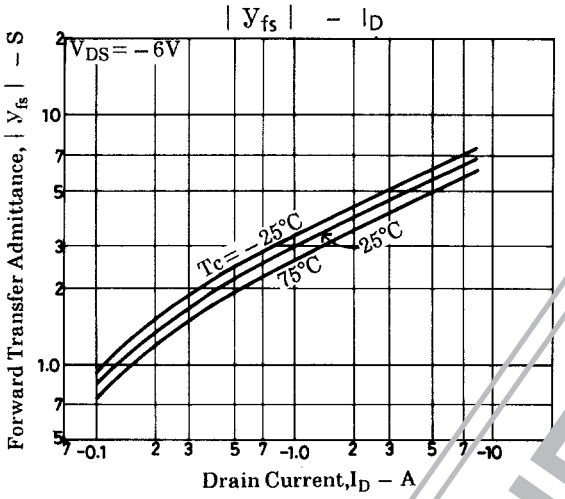
Electrical Characteristics at Ta = 25˚C

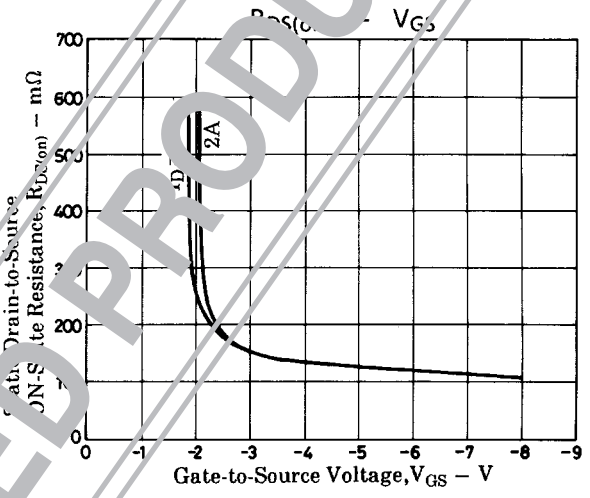
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
D-S Breakdown Voltage	$V_{(BR)DSS}$	I_D=–1mA, V_{GS}=0	–12			V
Zero-Gate Voltage Drain Current	I_{DSS}	V_{DS}=–10V, V_{GS}=0			–100	μA
Gate-to-Source Leakage Current	I_{GSS}	V_{GS}=±8V, V_{DS}=0			±10	μA
Cutoff Voltage	$V_{GS(off)}$	V_{DS}=–6V, I_D=–1mA	–0.5		–1.5	V
Forward Transfer Admittance	$\|Y_{fs}\|$	V_{DS}=–6V, I_D=–1A	2.5	4		S
Static Drain-to-Source On-State Resistance	$R_{DS(on)}$	I_D=–2A, V_{GS}=–4V		135	177	mΩ
	$R_{DS(on)}$	I_D=–1A, V_{GS}=–2.5V		185	300	mΩ
Input Capacitance	Ciss	V_{DS}=–6V, f=1MHz		400		pF
Output Capacitance	Coss	V_{DS}=–6V, f=1MHz		370		pF
Reverse Transfer Capacitance	Crss	V_{DS}=–6V, f=1MHz		160		pF
Turn-ON Delay Time	$t_{d(on)}$	See specified Test Circuit		20		ns
Rise Time	t_r	See specified Test Circuit		120		ns
Turn-OFF Delay Time	$t_{d(off)}$	See specified Test Circuit		140		ns
Fall Time	t_f	See specified Test Circuit		180		ns
Diode Forward Voltage	V_{SD}	I_S=–4A, V_{GS}=0		–1.0	–1.2	V

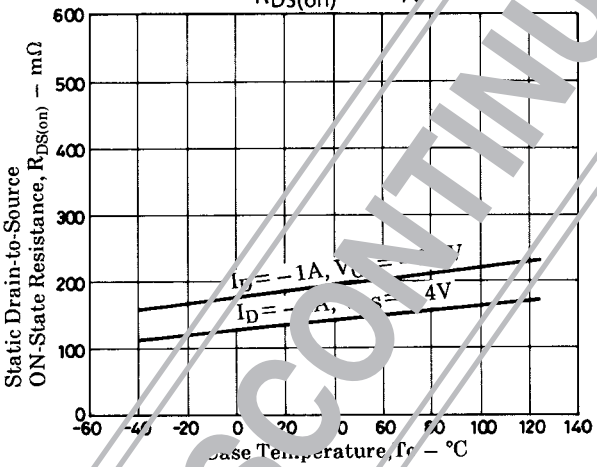
· Marking:207

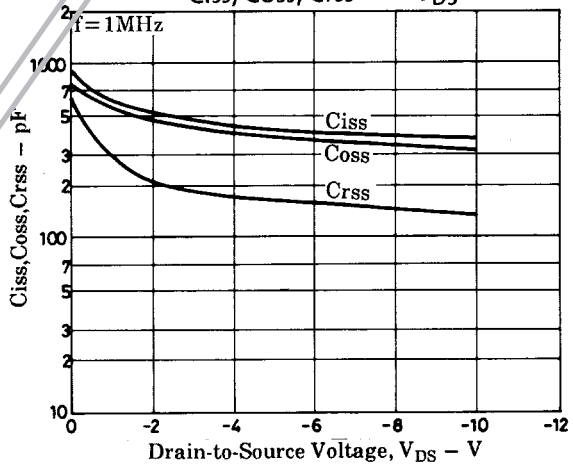


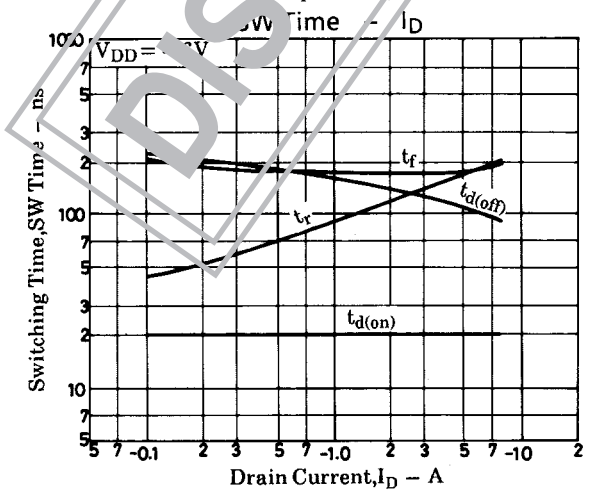


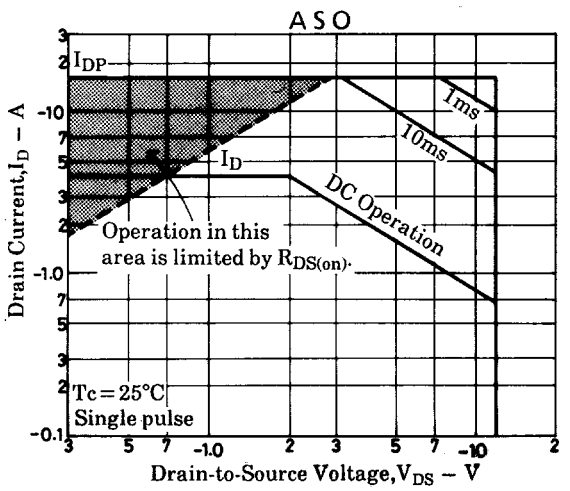


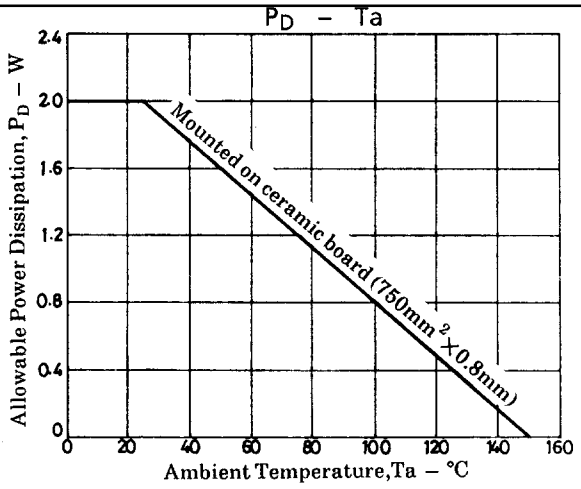


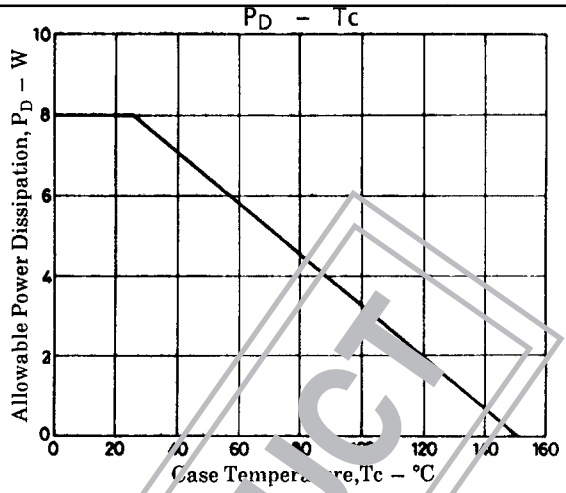












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