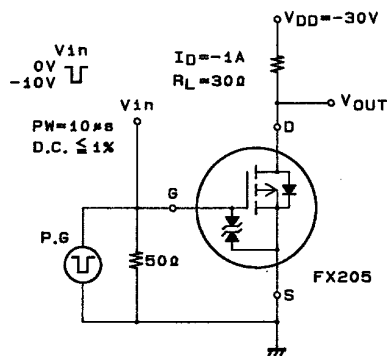


SANYO**FX205**

P-Channel Silicon MOSFET

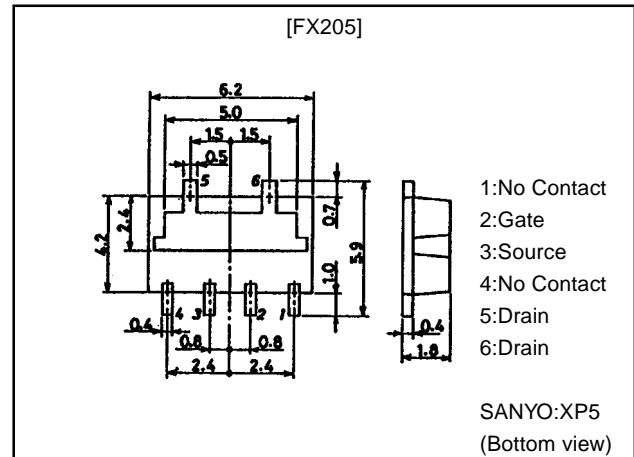
Very High-Speed Switching Applications**Features**

- Low ON-resistance.
- Very high-speed switching.
- Low-voltage drive.

Switching Time Test Circuit**Package Dimensions**

unit:mm

2121

**Specifications****Absolute Maximum Ratings at Ta = 25°C**

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V_{DSS}		-60	V
Gate-to-Source Voltage	V_{GSS}		±25	V
Drain Current (DC)	I_D		-2	A
Drain Current (Pulse)	I_{DP}	PW≤10μs, duty cycle≤1%	-8	A
Allowable Power Dissipation	P_D	Tc=25°C	8	W
	P_D	Mounted on ceramic board (750mm ² ×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	$V_{(BR)DSS}$	$I_D = -1mA, V_{GS} = 0$	-60			V
G-S Breakdown Voltage	$V_{(BR)GSS}$	$I_G = ±100μs, V_{DS} = 0$	±25			V
Zero-Gate Voltage Drain Current	I_{DSS}	$V_{DS} = -60V, V_{GS} = 0$			-100	μA
Gate-to-Source Leakage Current	I_{GSS}	$V_{GS} = ±20V, V_{DS} = 0$			±10	μA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS} = -10V, I_D = -1mA$	-1.5		-2.5	V
Forward Transfer Admittance	$ Y_{fs} $	$V_{DS} = -10V, I_D = -1A$	1.2	2		S
Static Drain-to-Source ON-State Resistance	$R_{DS(on)}$	$I_D = -1A, V_{GS} = -10V$		300	400	mΩ
	$R_{DS(on)}$	$I_D = -1A, V_{GS} = -4V$		450	650	mΩ
Input Capacitance	C_{iss}	$V_{DS} = -20V, f = 1MHz$		240		pF
Output Capacitance	C_{oss}	$V_{DS} = -20V, f = 1MHz$		150		pF
Reverse Transfer Capacitance	C_{rss}	$V_{DS} = -20V, f = 1MHz$		40		pF
Turn-ON Delay Time	$t_{d(on)}$	See specified Test Circuit		12		ns
Rise Time	t_r	See specified Test Circuit		16		ns
Turn-OFF Delay Time	$t_{d(off)}$	See specified Test Circuit		85		ns
Fall Time	t_f	See specified Test Circuit		55		ns
Diode Forward Voltage	V_{SD}	$I_S = -2A, V_{GS} = 0$		-1.0	-1.5	V

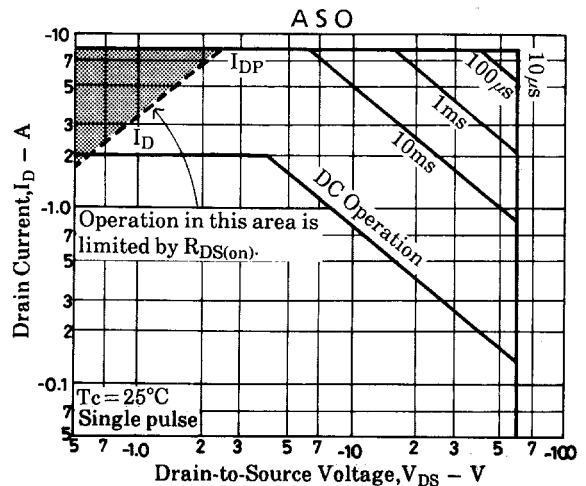
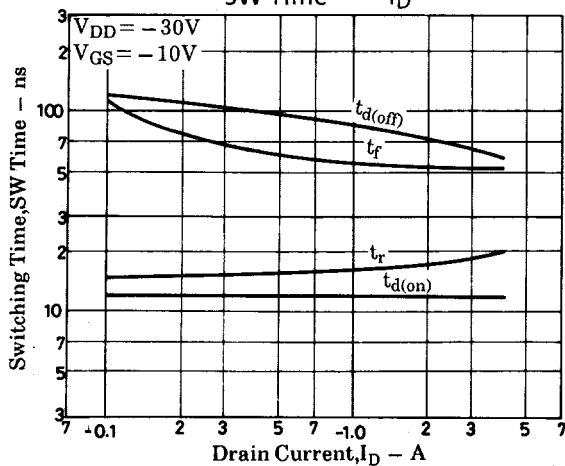
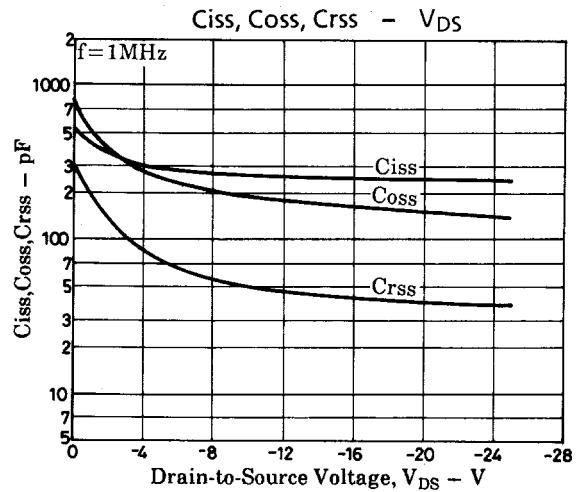
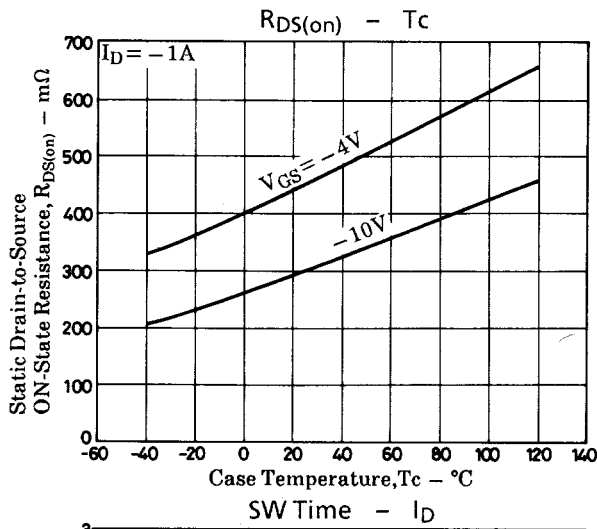
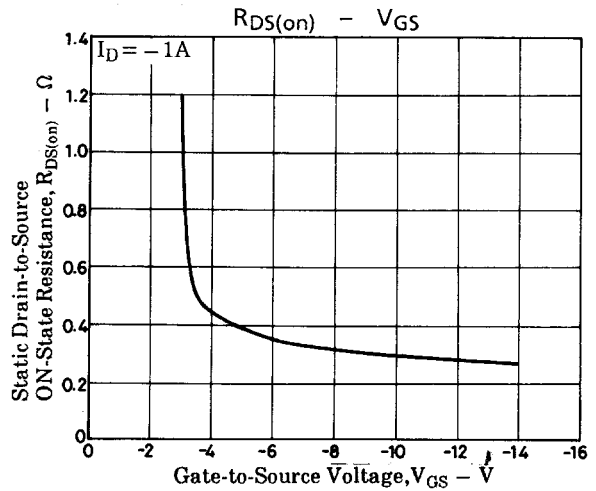
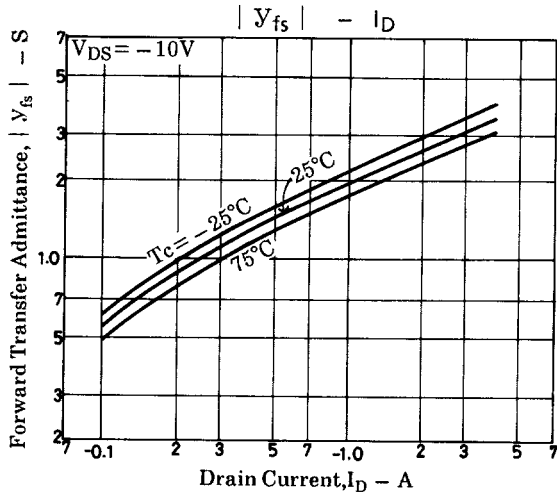
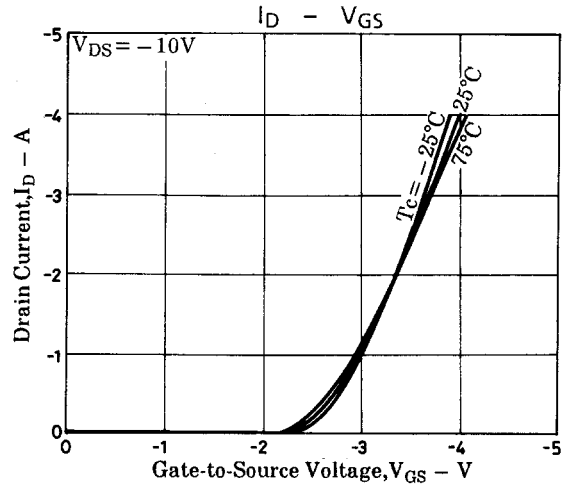
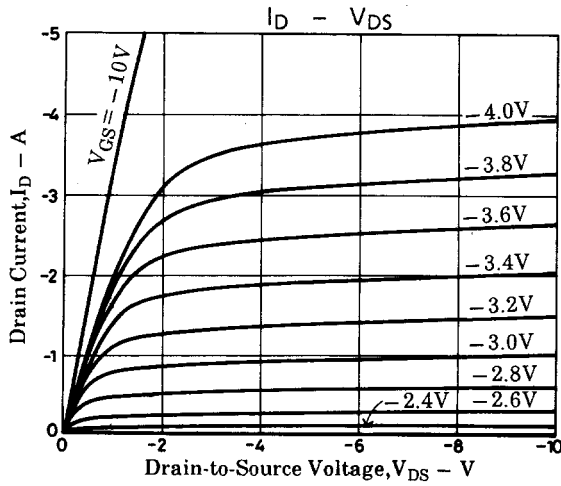
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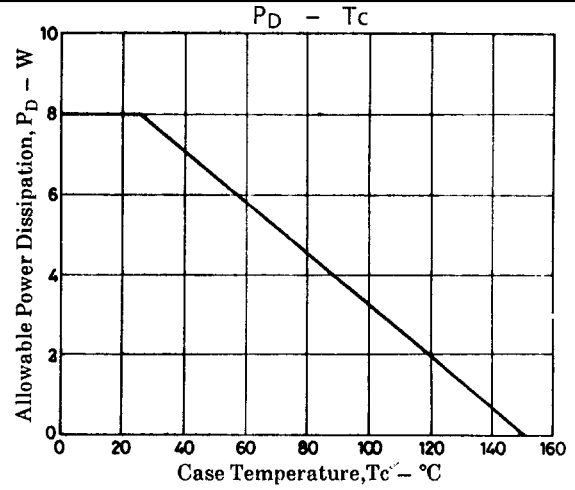
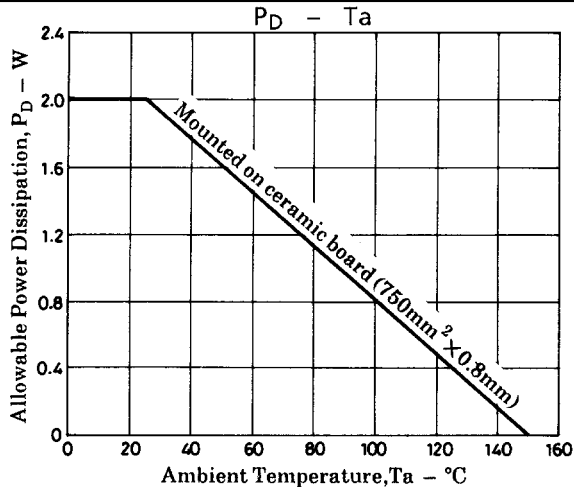
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