

	No.4745	2SJ258
		P-Channel MOS Silicon FET Very High-Speed Switching Applications

Features

- Low ON resistance.
- Very high-speed switching.
- Low-voltage drive.
- Surface mount type device making the following possible
 - Reduction in the assembling time for 2SJ258-applied equipment
 - High-density surface mount applications
 - Small size of 2SJ258-applied equipment

Absolute Maximum Ratings at Ta = 25°C

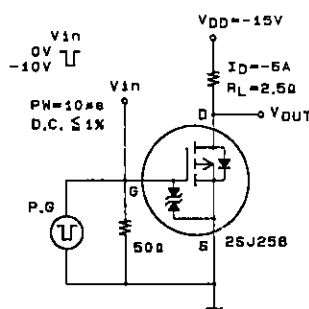
Drain-to-Source Voltage	V _{DSS}	-30	V
Gate-to-Source Voltage	V _{GSS}	±20	V
Drain Current(DC)	I _D	-12	A
Drain Current(Pulse)	I _{DP}	-48	A
Allowable Power Dissipation	P _D	1.65	W
		60	W
Channel Temperature	T _{ch}	150	°C
Storage Temperature	T _{stg}	-55 to +150	°C

T_c = 25°C

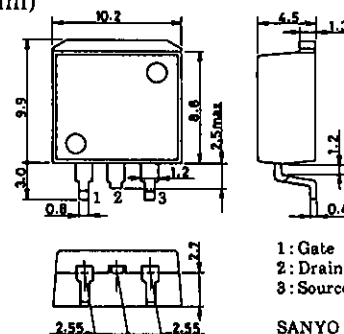
Electrical Characteristics at Ta = 25°C

			min	typ	max	unit
D-S Breakdown Voltage	V _{(BR)DSS}	I _D = -1mA, V _{GS} = 0	-30			V
G-S Breakdown Voltage	V _{(BR)GSS}	I _G = ±100μA, V _{DS} = 0	±20			V
Zero-Gate Voltage	I _{DSS}	V _{DS} = -30V, V _{GS} = 0			-100	μA
Drain Current						
Gate-to-Source Leakage Current	I _{GSS}	V _{GS} = ±16V, V _{DS} = 0			±10	μA
Cutoff Voltage	V _{GS(off)}	V _{DS} = -10V, I _D = -1mA	-1.0		-2.0	V
Forward Transfer Admittance	Y _{fs}	V _{DS} = -10V, I _D = -6A	5	8		S
Static Drain-to-Source	R _{DS(on)}	I _D = -6A, V _{GS} = -10V		0.07	0.095	Ω
ON-State Resistance	R _{DS(on)}	I _D = -6A, V _{GS} = -4V		0.095	0.13	Ω
Input Capacitance	C _{iss}	V _{DS} = -10V, f = 1MHz		1300		pF
Output Capacitance	C _{oss}	V _{DS} = -10V, f = 1MHz		780		pF
Reverse Transfer Capacitance	C _{rss}	V _{DS} = -10V, f = 1MHz		290		pF
Turn-ON Delay Time	t _{d(on)}	See specified Test Circuit.		16		ns
Rise Time	t _r	"		60		ns
Turn-OFF Delay Time	t _{d(off)}	"		300		ns
Fall Time	t _f	"		250		ns
Diode Forward Voltage	V _{SD}	I _S = -12A, V _{GS} = 0	-1.0	-1.5		V

Switching Time Test Circuit



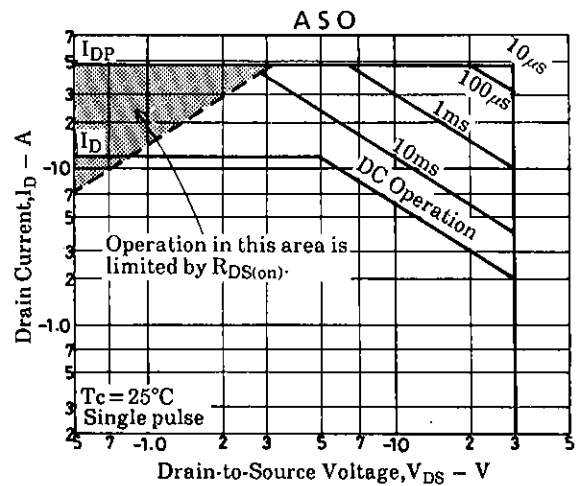
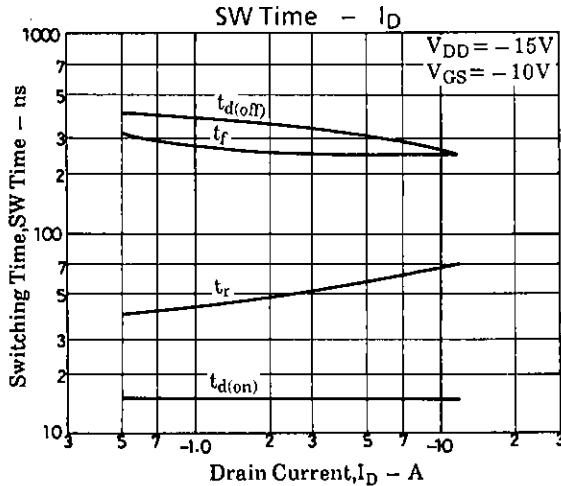
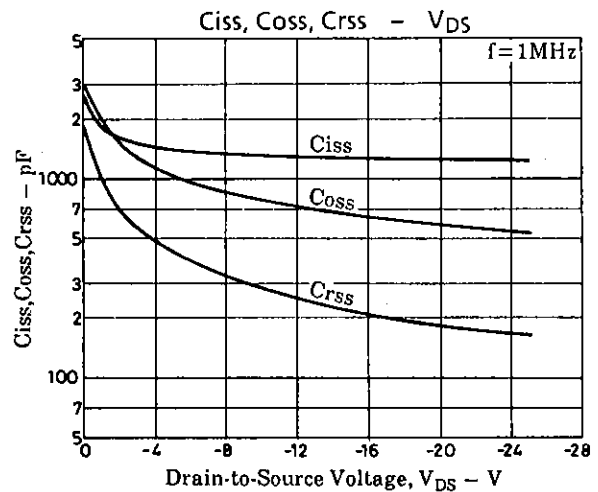
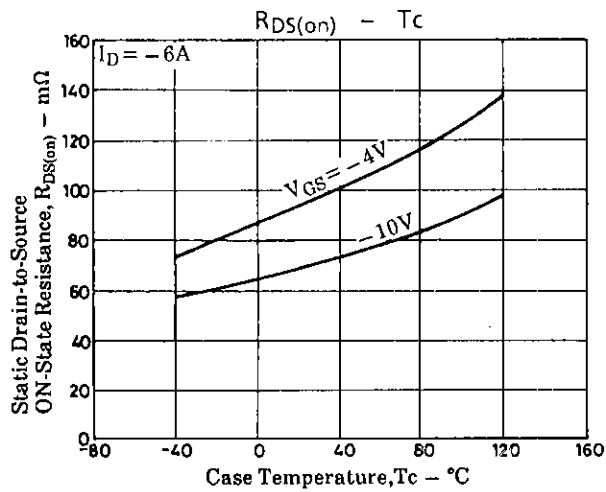
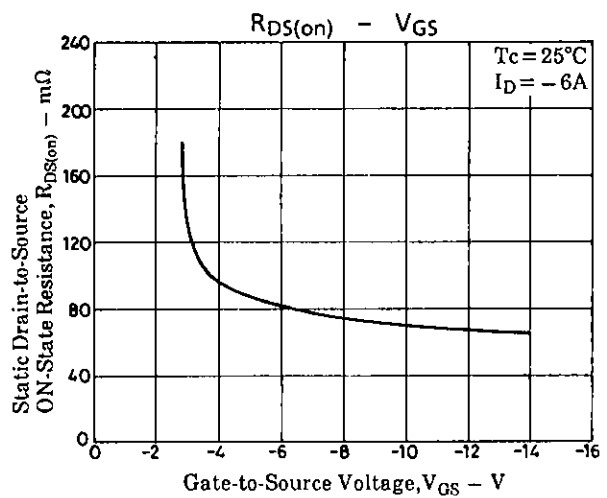
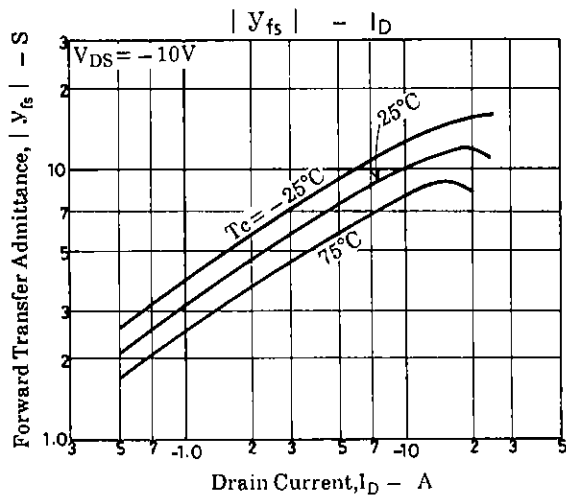
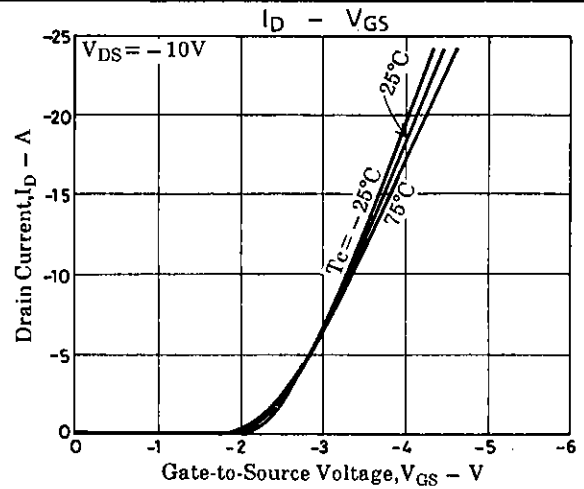
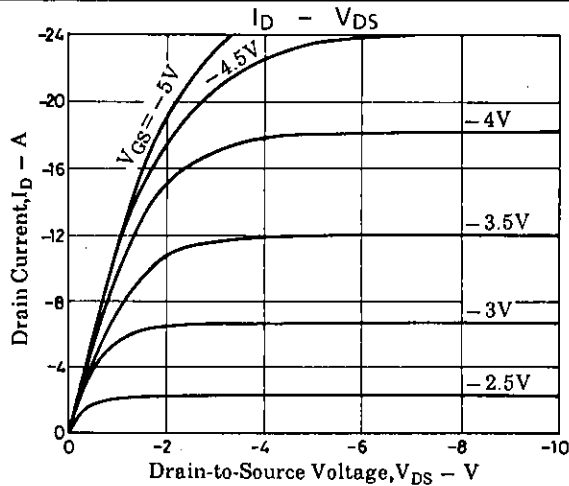
Package Dimensions 2090A (unit : mm)

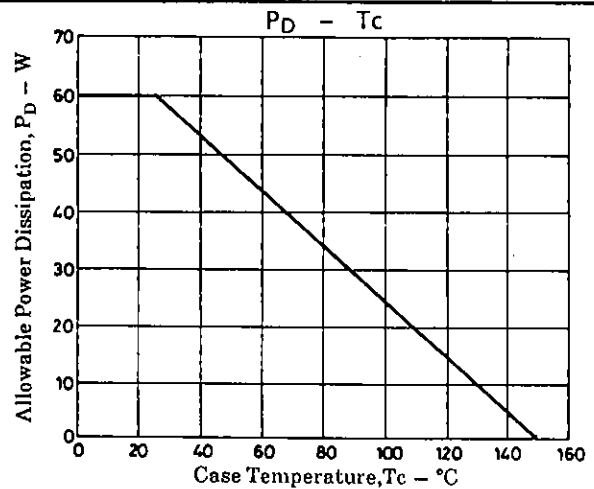
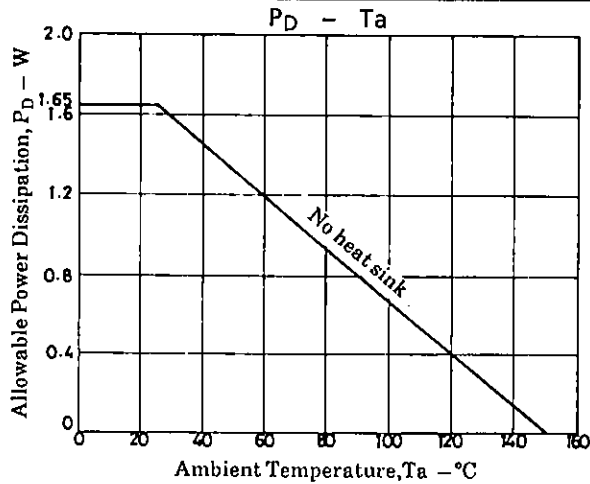


1: Gate
2: Drain
3: Source

SANYO: SMP-FD

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