

SANYO	No.4221	2SJ285
		P-Channel MOS Silicon FET Very High-Speed Switching Applications

Features

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

Absolute Maximum Ratings at Ta = 25°C

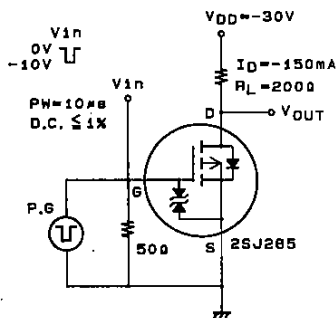
Drain to Source Voltage	V_{DSS}	-60	V	unit
Gate to Source Voltage	V_{GSS}	±15	V	
Drain Current(DC)	I_D	-250	mA	
Drain Current(Pulse)	I_{DP}	-1	A	
Allowable Power Dissipation	P_D	250	mW	
Channel Temperature	T_{ch}	150	°C	
Storage Temperature	T_{stg}	-55 to +150	°C	

Electrical Characteristics at Ta = 25°C

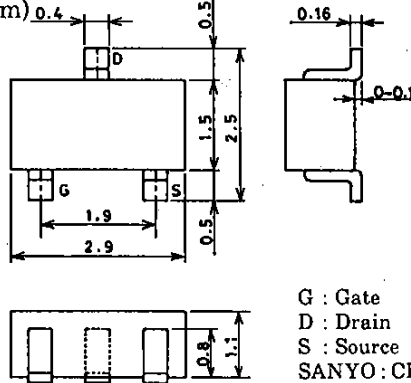
			min	typ	max	unit
D-S Breakdown Voltage	$V_{(BR)DSS}$	$I_D = -1mA, V_{GS} = 0$	-60			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS} = -60V, V_{GS} = 0$			-100	μA
Gate to Source Leakage Current	I_{GSS}	$V_{GS} = ±12V, V_{DS} = 0$			±10	μA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS} = -10V, I_D = -1mA$	-1.0		-2.0	V
Forward Transfer Admittance	$ y_{fs} $	$V_{DS} = -10V, I_D = -150mA$	200	350		mS
Static Drain to Source on State Resistance	$R_{DS(on)}$	$I_D = -150mA, V_{GS} = -10V$		2.2	3.0	Ω
	$R_{DS(on)}$	$I_D = -150mA, V_{GS} = -4V$		3.0	4.0	Ω
Input Capacitance	C_{iss}	$V_{DS} = -20V, f = 1MHz$		45		pF
Output Capacitance	C_{oss}	$V_{DS} = -20V, f = 1MHz$		20		pF
Reverse Transfer Capacitance	C_{rss}	$V_{DS} = -20V, f = 1MHz$		5		pF
Turn-ON Delay Time	$t_{d(on)}$	See specified Test Circuit.		7		ns
Rise Time	t_r	"		10		ns
Turn-OFF Delay Time	$t_{d(off)}$	"		40		ns
Fall Time	t_f	"		35		ns
Diode Forward Voltage	V_{SD}	$I_S = -250mA, V_{GS} = 0$	-1			V

Marking : BM

Switching Time Test Circuit

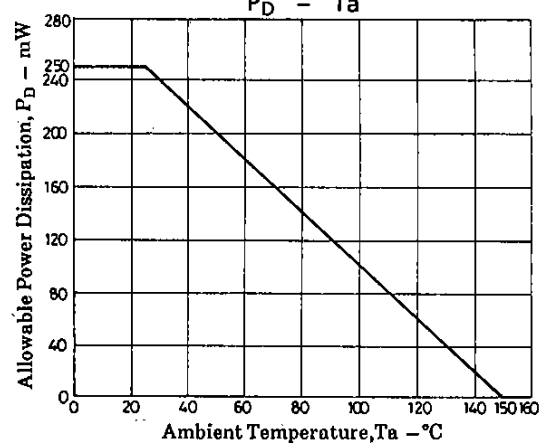
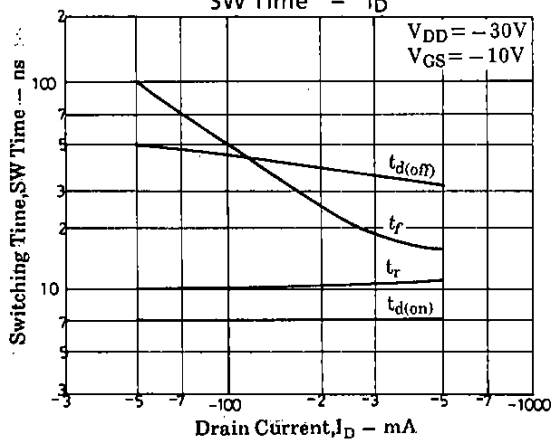
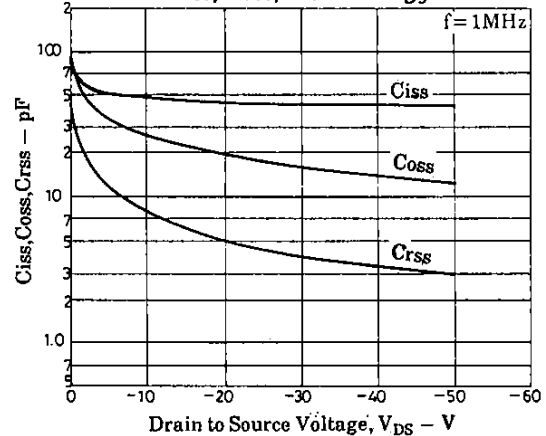
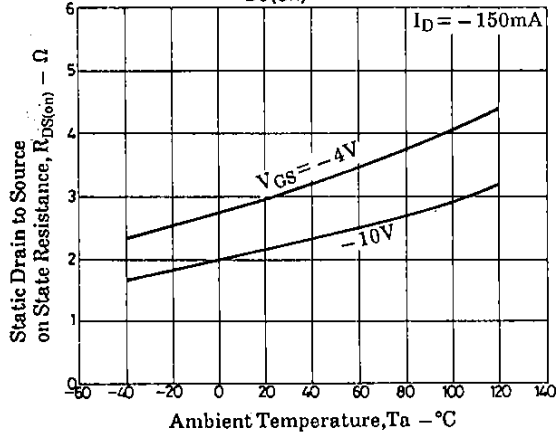
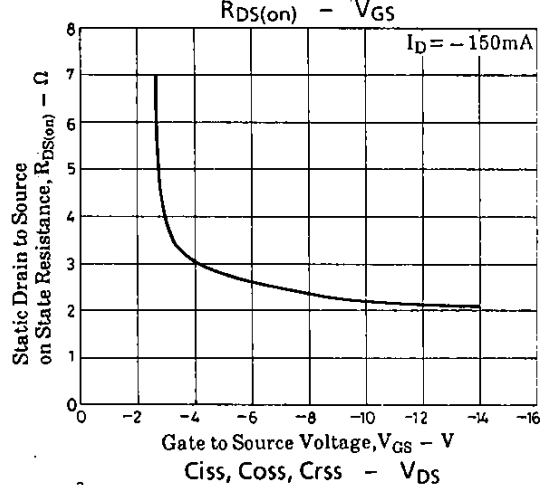
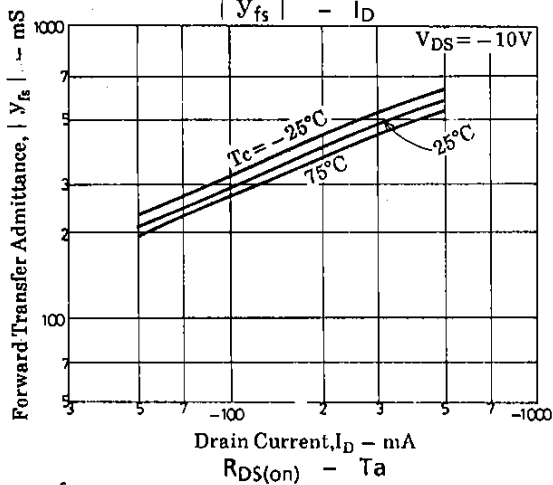
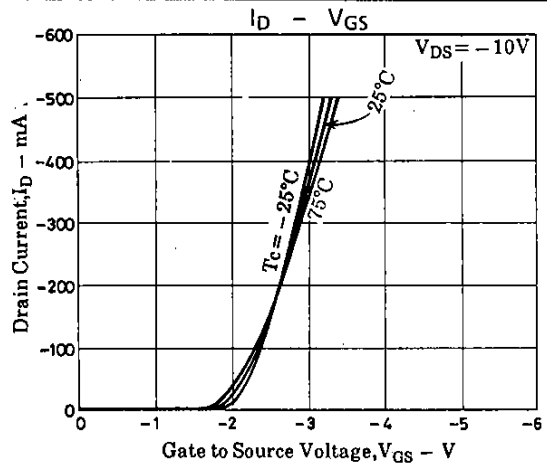
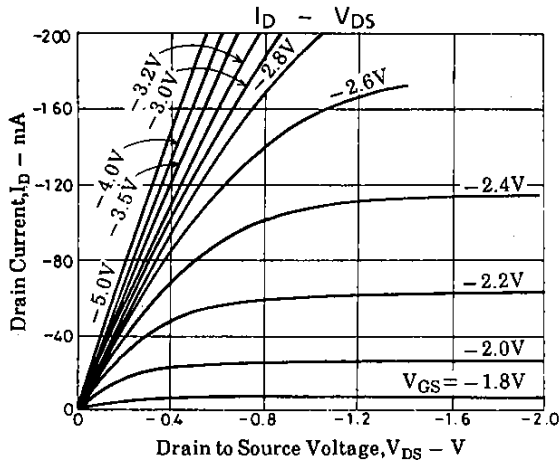


Package Dimensions 2091
(unit : mm)



G : Gate
D : Drain
S : Source
SANYO : CP

SANYO Electric Co., Ltd. Semiconductor Business Headquarters
TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110 JAPAN



- No products described or contained herein are intended for use in surgical implants, life-support systems, aerospace equipment, nuclear power control systems, vehicles, disaster/crime-prevention equipment and the like, the failure of which may directly or indirectly cause injury, death or property loss.
- Anyone purchasing any products described or contained herein for an above-mentioned use shall:
 - ① Accept full responsibility and indemnify and defend SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors and all their officers and employees, jointly and severally, against any and all claims and litigation and all damages, cost and expenses associated with such use:
 - ② Not impose any responsibility for any fault or negligence which may be cited in any such claim or litigation on SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors or any of their officers and employees jointly or severally.
- Information (including circuit diagrams and circuit parameters) herein is for example only; it is not guaranteed for volume production. SANYO believes information herein is accurate and reliable, but no guarantees are made or implied regarding its use or any infringements of intellectual property rights or other rights of third parties.