

SANYO	No.4240	2SJ275
		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 number of manufacturing processes for 2SJ275-applied equipment.
 - High density surface mount applications.
 - Small size of 2SJ275-applied equipment.

Absolute Maximum Ratings at Ta = 25°C

Drain to Source Voltage	V_{DSS}		-100	V	
Gate to Source Voltage	V_{GSS}		±15	V	
Drain Current(DC)	I_D		-6	A	
Drain Current(Pulse)	I_{DP}	$PW \leq 10\mu s, \text{ duty cycle} \leq 1\%$	-24	A	
Allowable Power Dissipation	P_D		1.65	W	
		$T_c = 25^\circ C$	50	W	
Channel Temperature	T_{ch}		150	°C	
Storage Temperature	T_{stg}		-55 to +150	°C	

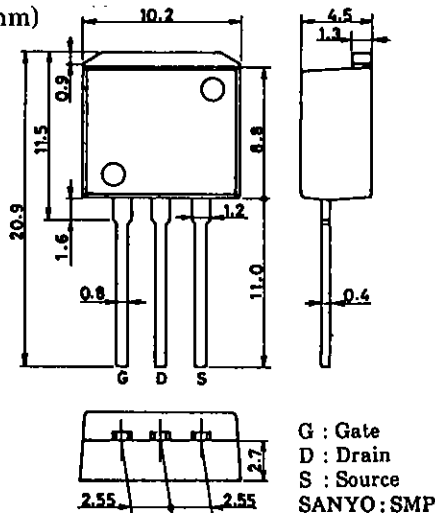
Electrical Characteristics at Ta = 25°C

			min	typ	max	unit
D-S Breakdown Voltage	$V_{(BR)DSS}$	$I_D = -1mA, V_{GS} = 0$	-100			V
G-S Breakdown Voltage	$V_{(BR)GSS}$	$I_G = \pm 100\mu A, V_{DS} = 0$	±15			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS} = -100V, V_{GS} = 0$			-100	μA
Gate to Source Leakage Current	I_{GSS}	$V_{GS} = \pm 12V, V_{DS} = 0$			±10	μA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS} = -10V, I_D = -1mA$	-1.0		-2.0	V
Forward Transfer Admittance	$ Y_{fs} $	$V_{DS} = -10V, I_D = -3A$	3	5		S
Static Drain to Source on State Resistance	$R_{DS(on)}$	$I_D = -3A, V_{GS} = -10V$		0.3	0.4	Ω
	$R_{DS(on)}$	$I_D = -3A, V_{GS} = -4V$		0.4	0.55	Ω

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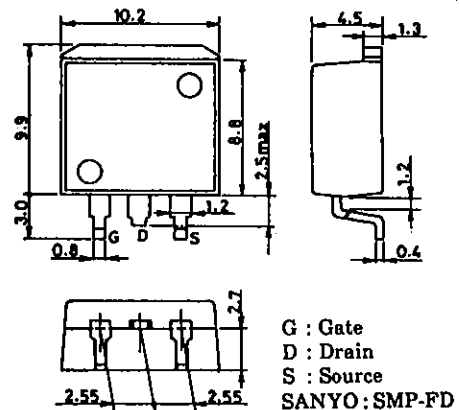
Package Dimensions 2093

(unit: mm)



Package Dimensions 2090

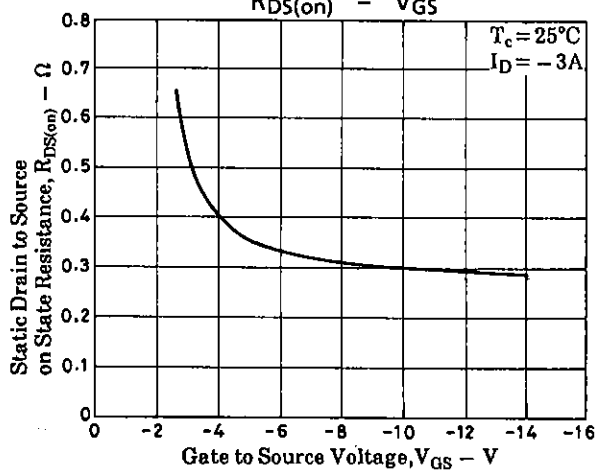
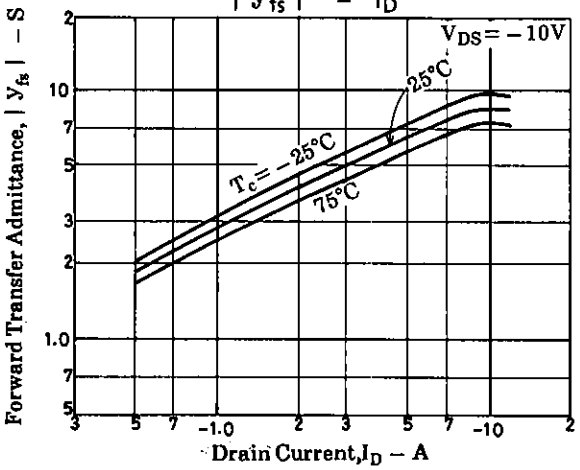
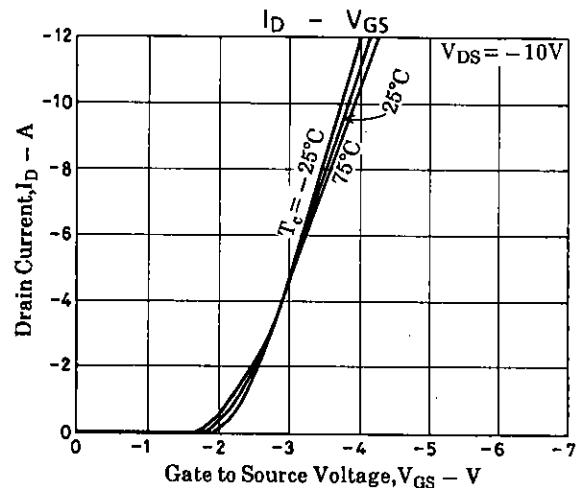
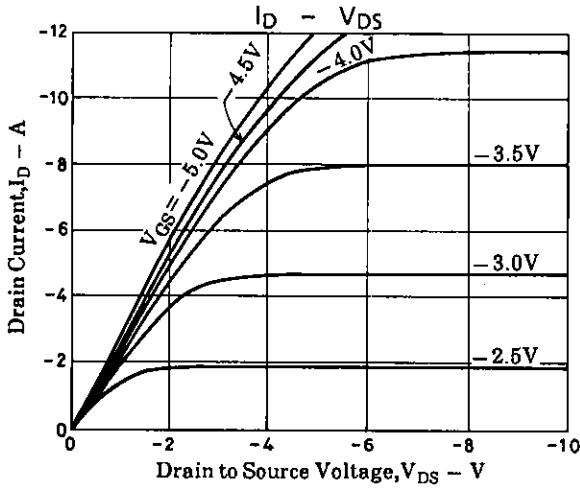
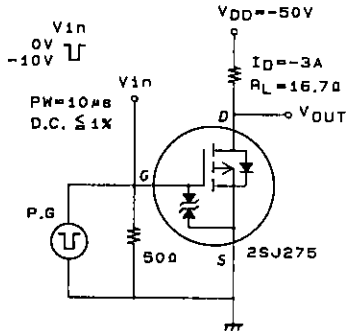
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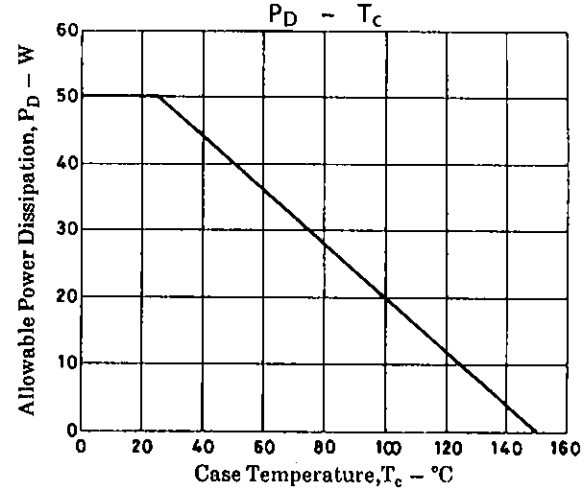
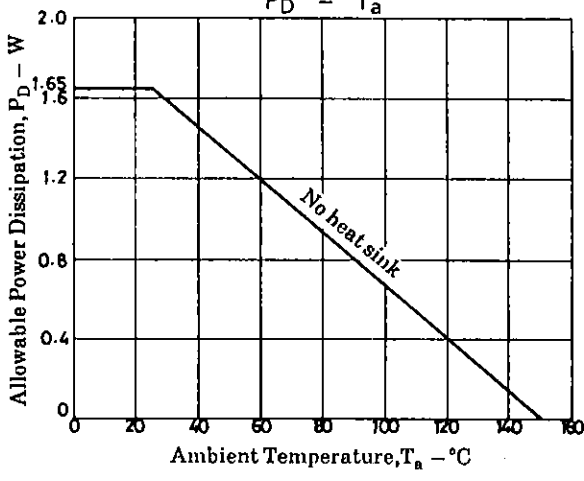
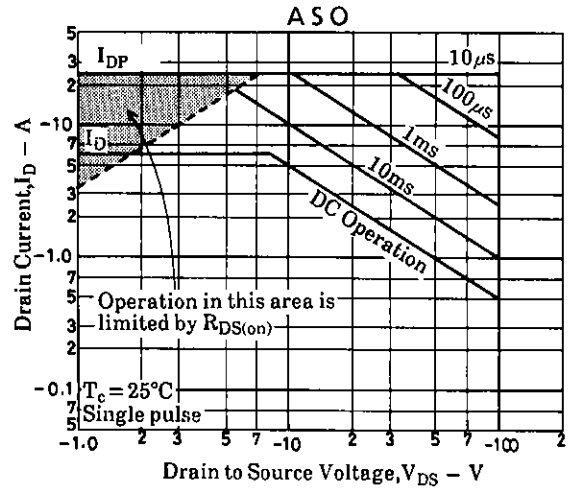
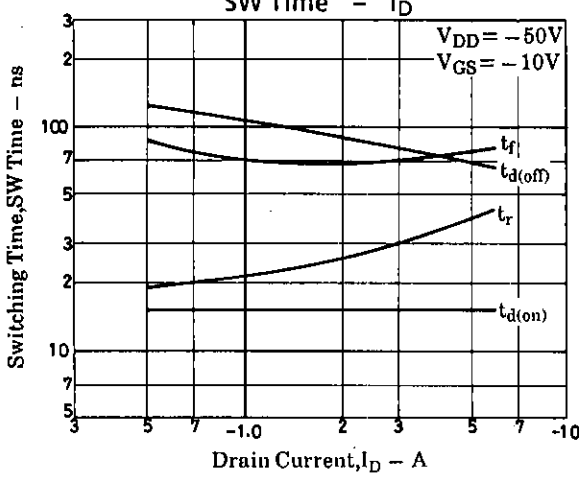
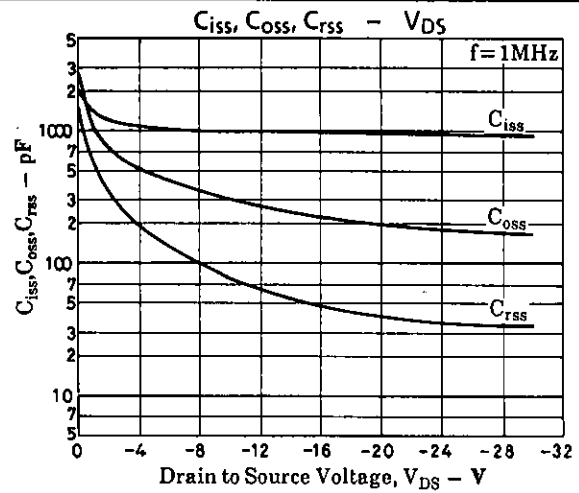
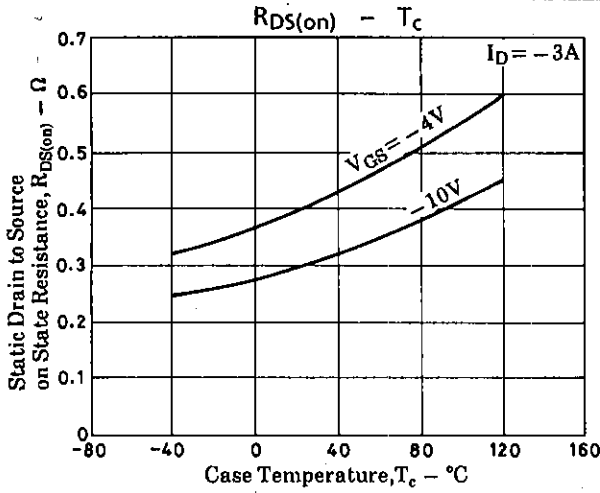


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			min	typ	max	unit
Input Capacitance	C_{iss}	$V_{DS} = -20V, f = 1MHz$		950		pF
Output Capacitance	C_{oss}	$V_{DS} = -20V, f = 1MHz$		200		pF
Reverse Transfer Capacitance	C_{rss}	$V_{DS} = -20V, f = 1MHz$		40		pF
Turn-ON Delay Time	$t_{d(on)}$	See specified Test Circuit.		15		ns
Rise Time	t_r			30		ns
Turn-OFF Delay Time	$t_{d(off)}$			80		ns
Fall Time	t_f			70		ns
Diode Forward Voltage	V_{SD}	$I_S = -6A, V_{GS} = 0$	-1.0	-1.5		V

Switching Time Test Circuit





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