

No.4317

**2SJ307****SANYO**

P-Channel MOS Silicon FET  
Very High-Speed  
Switching Applications

**Features**

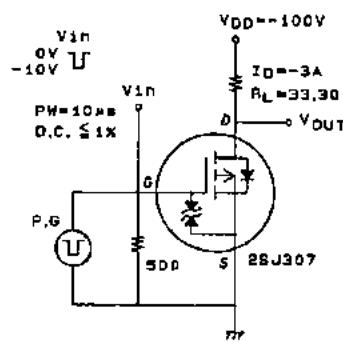
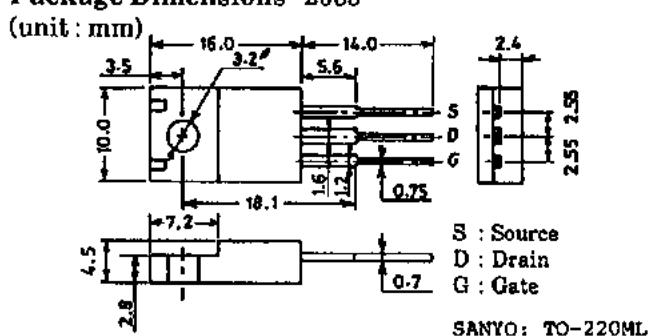
- Low ON resistance.
- Very high-speed switching.
- Low-voltage drive.
- Micaless package facilitating mounting.

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

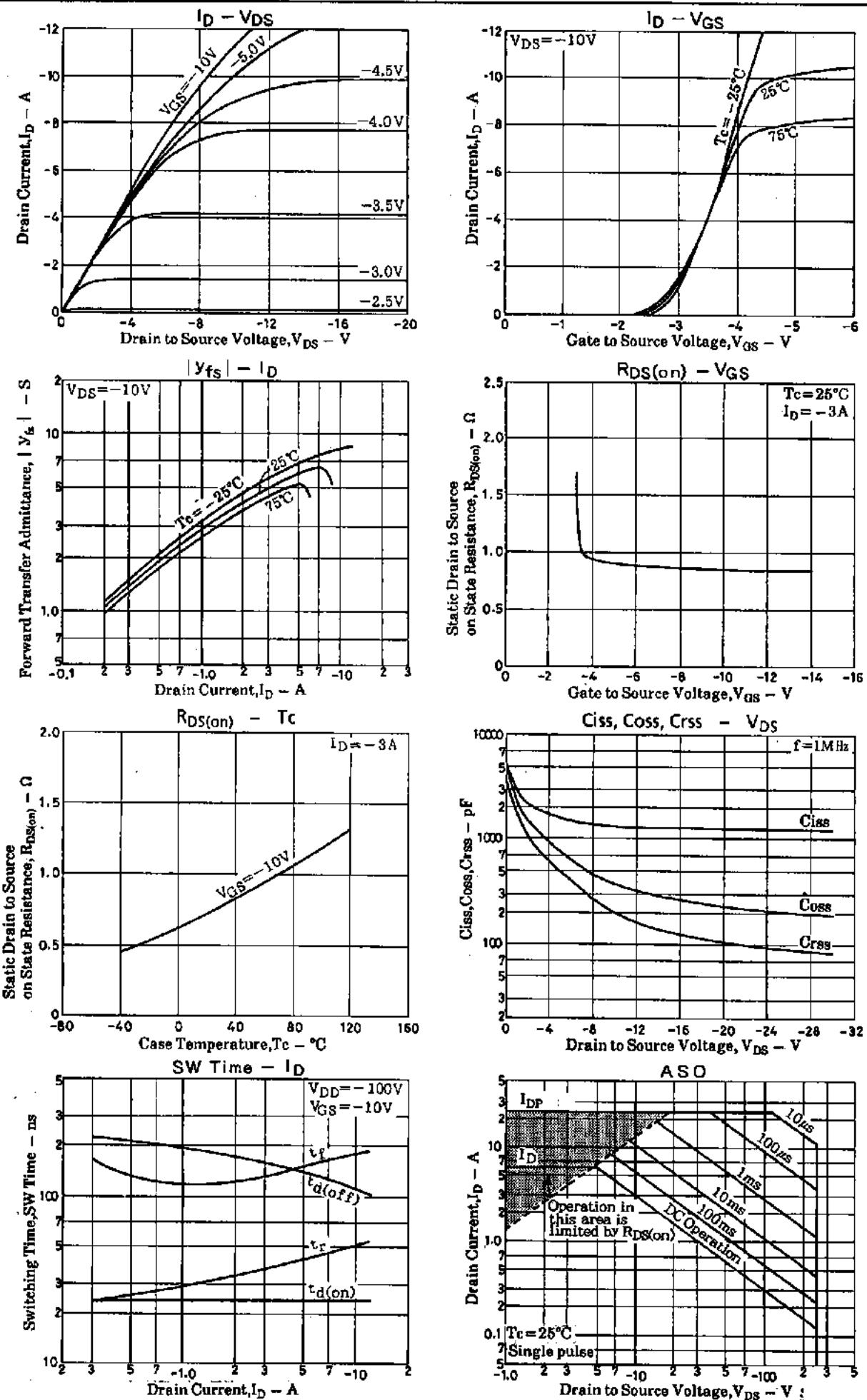
Drain to Source Voltage	V <sub>DSS</sub>	-250	V
Gate to Source Voltage	V <sub>GSS</sub>	±30	V
Drain Current(DC)	I <sub>D</sub>	-6	A
Drain Current(Pulse)	I <sub>DP</sub>	PW≤10μs, duty cycle≤1%	-24 A
Allowable Power Dissipation	P <sub>D</sub>		2.0 W
		T <sub>c</sub> =25°C	30 W
Channel Temperature	T <sub>ch</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-55 to +150	°C

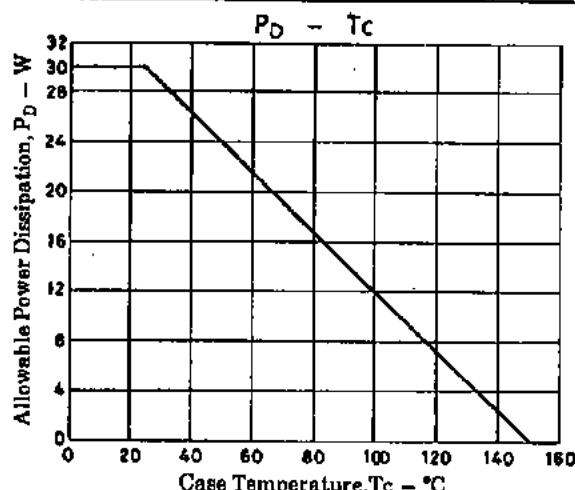
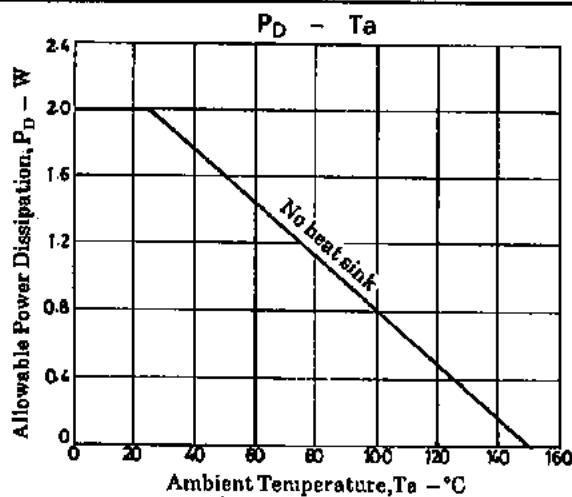
**Electrical Characteristics at Ta = 25°C**

			min	typ	max	unit
D-S Breakdown Voltage	V <sub>(BR)DSS</sub>	I <sub>D</sub> = -1mA, V <sub>GS</sub> =0	-250			V
G-S Breakdown Voltage	V <sub>(BR)GSS</sub>	I <sub>G</sub> = ±100μA, V <sub>DS</sub> =0	±30			V
Zero Gate Voltage	I <sub>DSS</sub>	V <sub>DS</sub> = -250V, V <sub>GS</sub> =0			-100	μA
Drain Current						
Gate to Source Leakage Current	I <sub>GSS</sub>	V <sub>GS</sub> = ±25V, V <sub>DS</sub> =0			±10	μA
Cutoff Voltage	V <sub>GS(off)</sub>	V <sub>DS</sub> = -10V, I <sub>D</sub> = -1mA	-1.5		-2.5	V
Forward Transfer Admittance	Y <sub>fs</sub>	V <sub>DS</sub> = -10V, I <sub>D</sub> = -3A	3	5		S
Static Drain to Source	R <sub>DSS(on)</sub>	I <sub>D</sub> = -3A, V <sub>GS</sub> = -10V	0.75	1.0		Ω
on State Resistance						
Input Capacitance	C <sub>iss</sub>	V <sub>DS</sub> = -20V, f=1MHz	1250			pF
Output Capacitance	C <sub>oss</sub>	V <sub>DS</sub> = -20V, f=1MHz	235			pF
Reverse Transfer Capacitance	C <sub>rss</sub>	V <sub>DS</sub> = -20V, f=1MHz	105			pF
Turn-ON Delay Time	t <sub>d(on)</sub>	See specified Test Circuit.	24			ns
Rise Time	t <sub>r</sub>	"	37			ns
Turn-OFF Delay Time	t <sub>d(off)</sub>	"	155			ns
Fall Time	t <sub>f</sub>	"	130			ns
Diode Forward Voltage	V <sub>SD</sub>	I <sub>S</sub> = -6A, V <sub>GS</sub> =0	-1.0	-1.5		V

**Switching Time Test Circuit****Package Dimensions 2063**

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