

**Features**

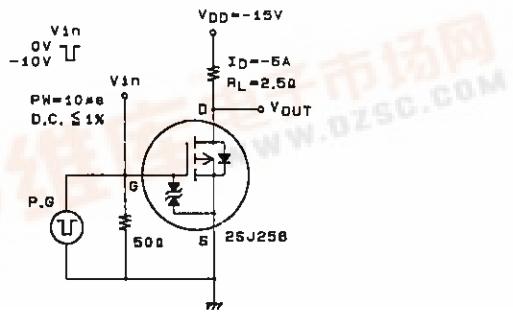
- Low ON resistance.
- Very high-speed switching.
- Low-voltage drive.
- Surface mount type device making the following possible
  - Reduction in the assembling time for 2SJ258-applied equipment
  - High-density surface mount applications
  - Small size of 2SJ258-applied equipment

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

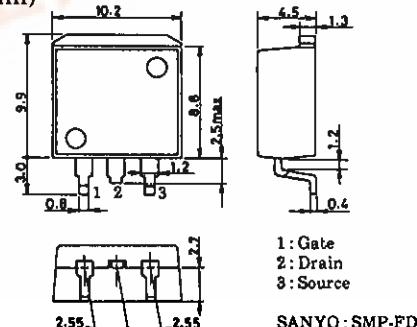
			unit
Drain-to-Source Voltage	V <sub>DSS</sub>	-30	V
Gate-to-Source Voltage	V <sub>GSS</sub>	±20	V
Drain Current(DC)	I <sub>D</sub>	-12	A
Drain Current(Pulse)	I <sub>DP</sub>	PW≤10μs, duty cycle≤1% -48	A
Allowable Power Dissipation	P <sub>D</sub>	1.65	W
		60	W
Channel Temperature	T <sub>ch</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-55 to +150	°C

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

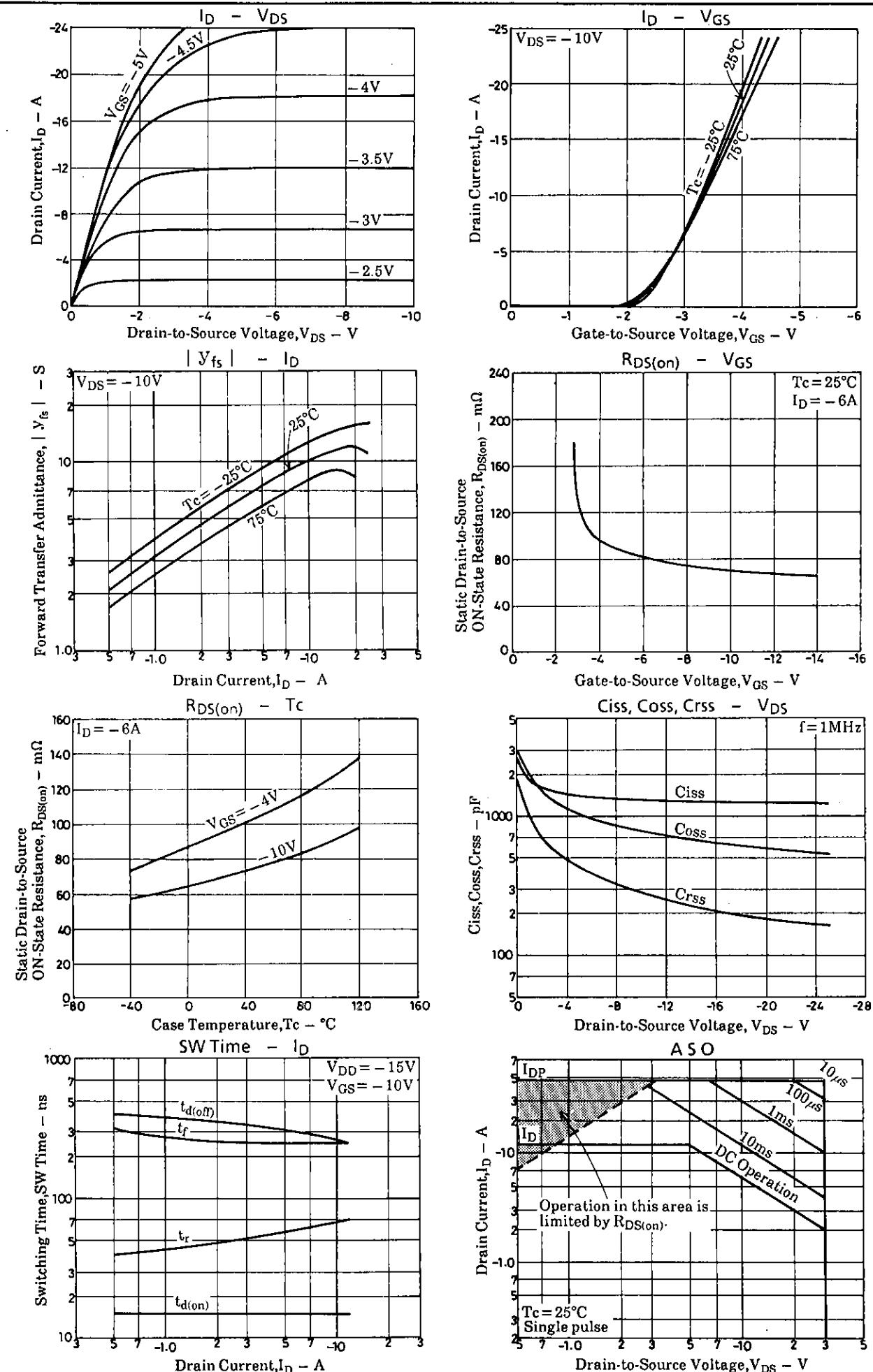
			min	typ	max	unit
D-S Breakdown Voltage	V <sub>(BR)DSS</sub>	I <sub>D</sub> = -1mA, V <sub>GS</sub> = 0	-30			V
G-S Breakdown Voltage	V <sub>(BR)GSS</sub>	I <sub>G</sub> = ±100μA, V <sub>DS</sub> = 0	±20			V
Zero-Gate Voltage	I <sub>DSS</sub>	V <sub>DS</sub> = -30V, V <sub>GS</sub> = 0			-100	μA
Drain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

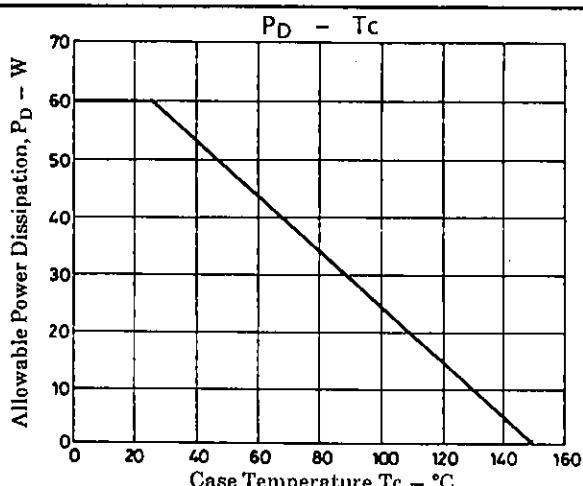
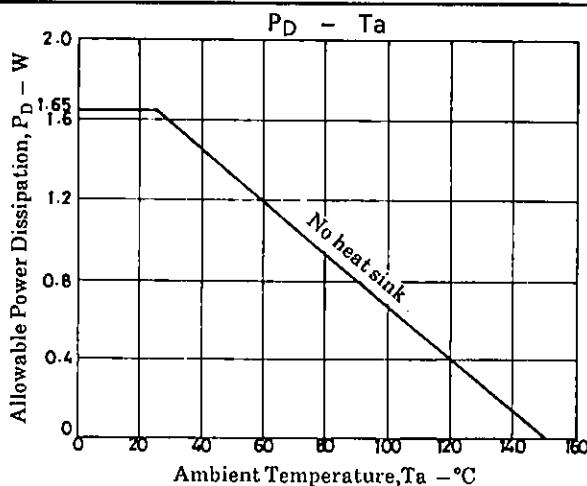
**Switching Time Test Circuit****Package Dimensions 2090A**

(unit : mm)



# 2SJ258





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