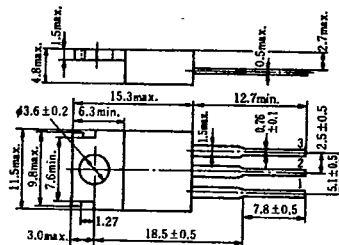
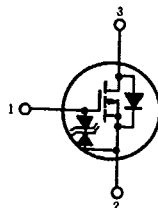


2SJ77K, 2SJ79K**SILICON P-CHANNEL MOS FET****HIGH SPEED POWER SWITCHING, HIGH FREQUENCY POWER AMPLIFIER**

Complementary Pair with 2SK214®, 2SK216®

■ FEATURES

- High Speed Switching.
- High Cutoff Frequency. ($f_c=30\text{MHz}$)
- High Breakdown Voltage.
- Suitable for Switching Regulator, DC-DC Converter, RF Amplifiers, and Ultrasonic Power Oscillators.



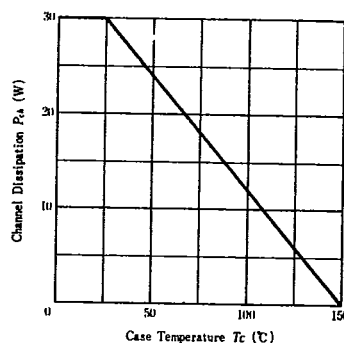
1. Gate
2. Source
(Flange)
3. Drain

(JEDEC TO-220AB)

(Dimensions in mm)

■ ABSOLUTE MAXIMUM RATINGS ($T_a=25^\circ\text{C}$)

Item	Symbol	Ratings		Unit
		2SJ77®	2SJ79®	
Drain-Source Voltage	V_{DS}	-160	-200	V
Gate-Source Voltage	V_{GS}	± 15		V
Drain Current	I_D	-500		mA
Body-Drain Diode Reverse Drain Current	I_{DR}	-500		mA
Channel Dissipation	P_{ch}	1.75		W
	P_{ch}^*	30		W
Channel Temperature	T_{ch}	150		$^\circ\text{C}$
Storage Temperature	T_{stg}	$-45 \sim +150$		$^\circ\text{C}$

*Value at $T_a=25^\circ\text{C}$ **POWER VS. TEMPERATURE DERATING****■ ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)**

Item	Symbol	Test Condition	min.	typ.	max.	Unit
Drain-Source Breakdown Voltage	$V_{(BR)DS}$	$I_D=-1\text{mA}, V_{GS}=2\text{V}$	-160	—	—	V
			-200	—	—	V
Gate-Source Breakdown Voltage	$V_{(BR)GS}$	$I_G=\pm 10\mu\text{A}, V_{DS}=0$	± 15	—	—	V
Gate-Source Voltage	V_{GSON}	$I_D=-10\text{mA}, V_{DS}=-10\text{V}^*$	-0.2	—	-1.5	V
Drain-Source Saturation Voltage	$V_{DS(sat)}$	$I_D=-10\text{mA}, V_{GS}=0^*$	—	—	-2.0	V
Forward Transfer Capacitance	$ y_f $	$I_D=-10\text{mA}, V_{DS}=-20\text{V}^*$	20	35	—	mS
Input Capacitance	C_{iss}	$V_{DS}=-10\text{V}, I_D=-10\text{mA}, f=1\text{MHz}$	—	120	—	pF
Reverse Transfer Capacitance	C_{rss}		—	4.8	—	pF

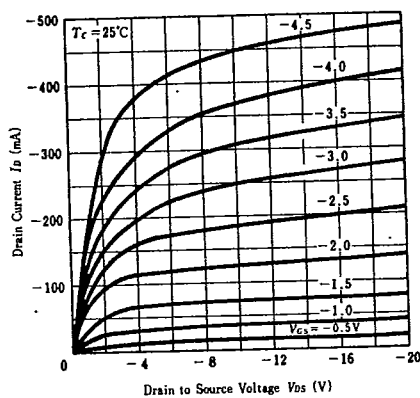
*Pulse Test

4496205 HITACHI/〔OPTOELECTRONICS〕

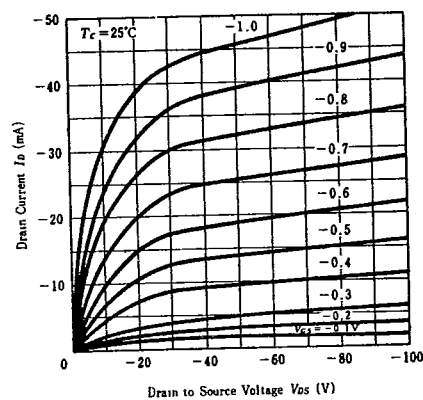
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2SJ77 ⑧, 2SJ79 ⑧

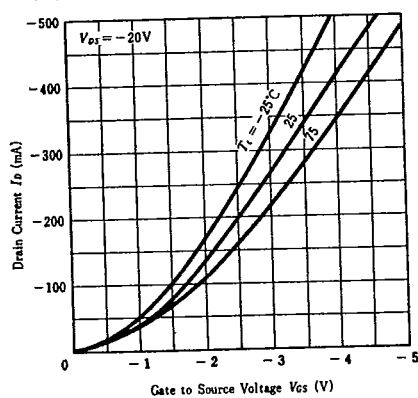
TYPICAL OUTPUT CHARACTERISTICS



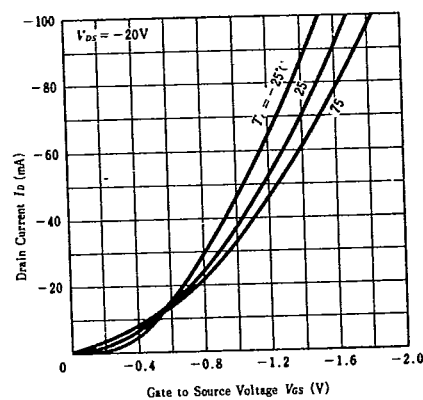
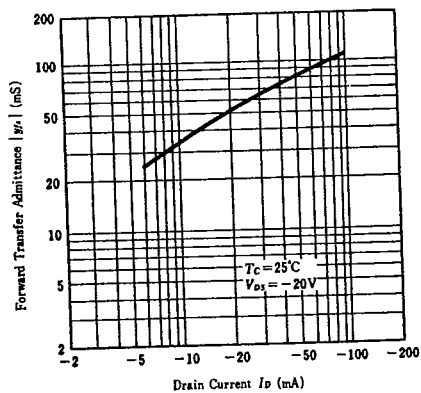
TYPICAL OUTPUT CHARACTERISTICS



TYPICAL TRANSFER CHARACTERISTICS



TYPICAL TRANSFER CHARACTERISTICS

FORWARD TRANSFER ADMITTANCE
VS. DRAIN CURRENTFORWARD TRANSFER ADMITTANCE
VS. FREQUENCY