P-Channel MOSFET Transistor

2SJ76 / J76

140V / 0.5A

DATASHEET

OEM – Hitachi

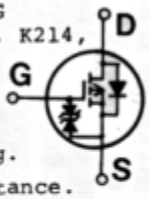
Source: Hitachi Databook Power Mosfet Data 4/83

Datasheet Rev. 2.0 – 09/19 – data without warranty / liability

2SJ76, 2SJ77, 2SJ78, 2SJ79

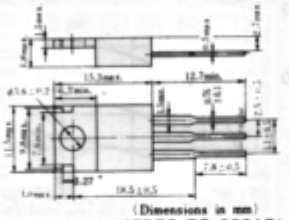
SILICON P-CHANNEL MOS FET

HIGH FREQUENCY AND LOW FREQUENCY POWER AMPLIFIER, HIGH SPEED SWITCHING
Complementary Pair with 2SK213, K214, K215, K216



Features;

- Suitable for Direct Mounting.
- High Forward Transfer Admittance.
- Excellent Frequency Response.
- Enhancement-Mode.



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

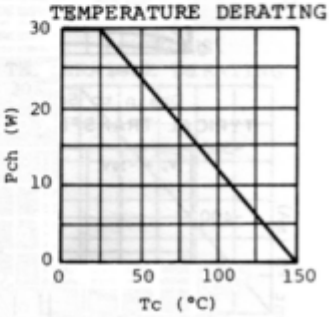
(Dimensions in mm)
(JEDEC TO-220AB)

■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Item	Symbol	Ratings				Unit
		J76	J77	J78	J79	
Drain-Source Voltage	V_{DSX}	-140	-160	-180	-200	V
Gate-Source Voltage	V_{GSS}	±15				V
Drain Current	I_D	-500				mA
Body-Drain Diode Reverse Drain Current	I_{DR}	-500				mA
Channel Dissipation	Pch	1.75				W
	Pch*	30				W
Channel Temperature	Tch	150				°C
Storage Temperature	Tstg	-45～+150				°C

*Value at Tc=25°C

POWER VS. TEMPERATURE DERATING



■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

Item		Symbol	Test Condition	min.	typ.	max.	Unit
Drain-Source Breakdown Voltage	J76	$V_{(BR)DSX}$	V_{GS}=2V , I_D=-1mA	-140	-	-	V
	J77			-160	-	-	V
	J78			-180	-	-	V
	J79			-200	-	-	V
Gate-Source Breakdown Voltage		$V_{(BR)GSS}$	I_G=±10μA , V_{DS}=0	±15	-	-	V
Gate-Source Voltage		$V_{GS(on)}$	I_D=-10mA , V_{DS}=-10V*	-0.2	-	-1.5	V
Drain-Source Saturation Voltage		$V_{DS(sat)}$	I_D=-10mA , V_{GD}=0 *	-	-	-2.0	V
Forward Transfer Admittance		$\|Yfs\|$	I_D=-10mA , V_{DS}=-20V*	-	35	-	mS
Input Capacitance		Ciss	V_{DS}=-10V, I_D=-10mA, f=1MHz	-	120	-	pF
Reverse Transfer Capacitance		Crss		-	4.8	-	pF

*Pulse Test

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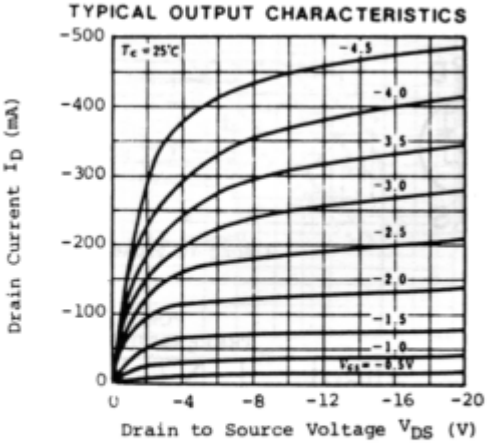
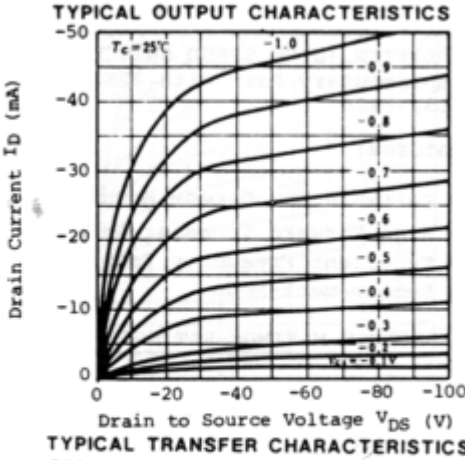
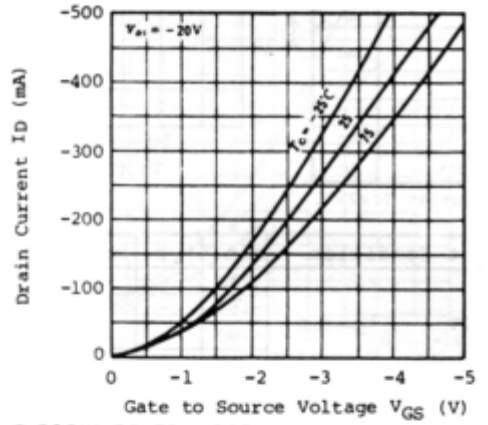
TYPICAL OUTPUT CHARACTERISTICS



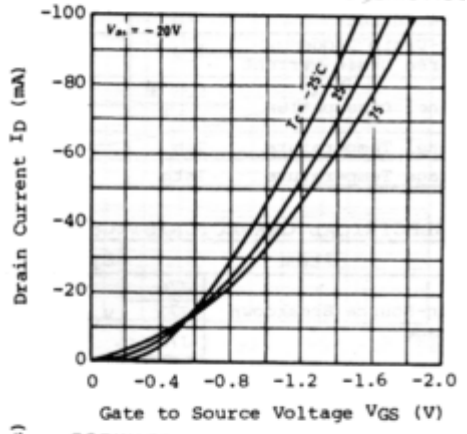
TYPICAL OUTPUT CHARACTERISTICS



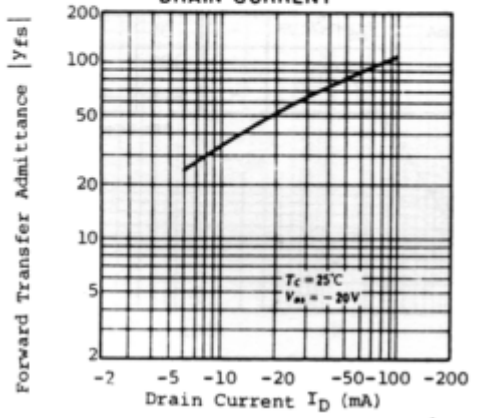
TYPICAL TRANSFER CHARACTERISTICS



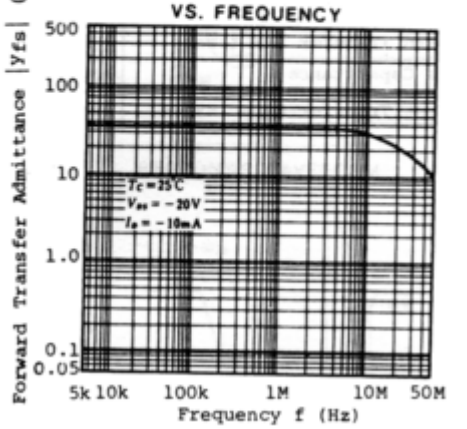
TYPICAL TRANSFER CHARACTERISTICS



FORWARD TRANSFER ADMITTANCE VS. DRAIN CURRENT



FORWARD TRANSFER ADMITTANCE VS. FREQUENCY



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