

N-Channel MOSFET Transistor

2SK135 / K135

160V / 7A

DATASHEET

OEM – Hitachi

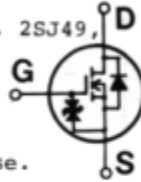
Source: Hitachi Databook Power Mosfet Data 4/83

2SK133, 2SK134, 2SK135

SILICON N-CHANNEL MOS FET

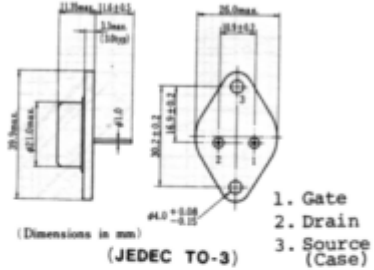
LOW FREQUENCY POWER AMPLIFIER

Complementary Pair with 2SJ48, 2SJ49, 2SJ50



Features;

- High Power Gain.
- Excellent Frequency Response.
- High Speed Switching.
- Wide Area of Safe Operation.
- Enhancement-Mode.
- Good Complementary Characteristics.
- Equipped with Gate Protection Diodes.

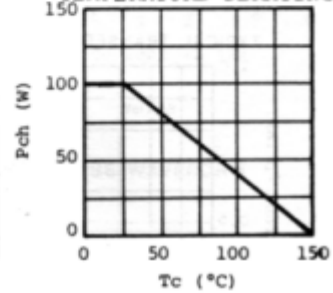


■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Item	Symbol	Rating			Unit
		K133	K134	K135	
Drain-Source Voltage	V _{DSX}	120	140	160	V
Gate-Source Voltage	V _{GSS}	±14			V
Drain Current	I _D	7			A
Body-Drain Diode Reverse Drain Current	I _{DR}	7			A
Channel Dissipation	P _{ch} *	100			W
Channel Temperature	T _{ch}	150			°C
Storage Temperature	T _{stg}	-55 ~ +150			°C

*Value at Tc=25°C

POWER VS. TEMPERATURE DERATING

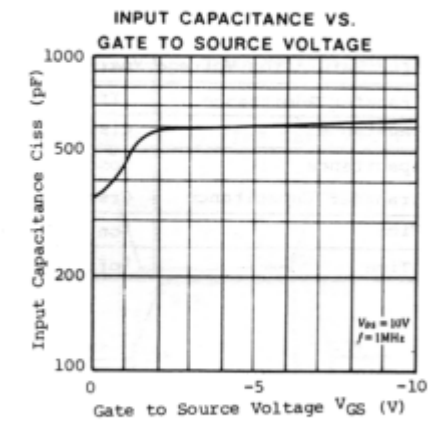
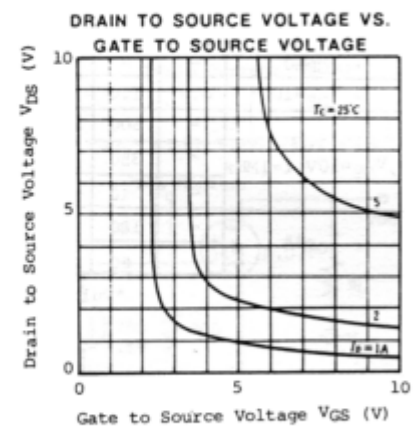
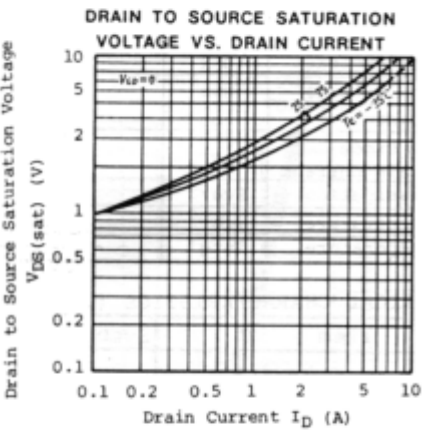
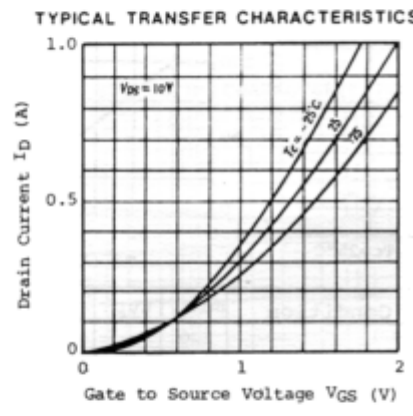
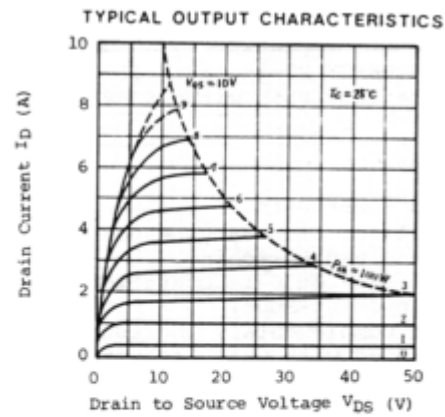
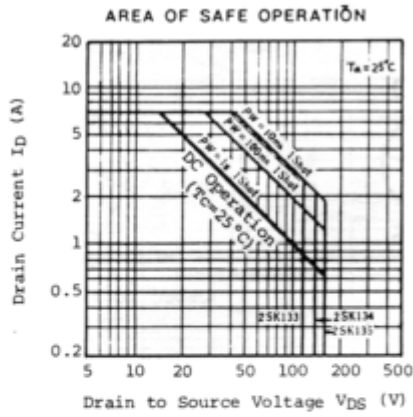


■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

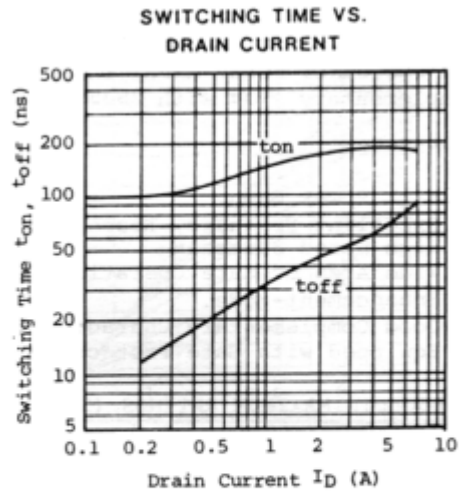
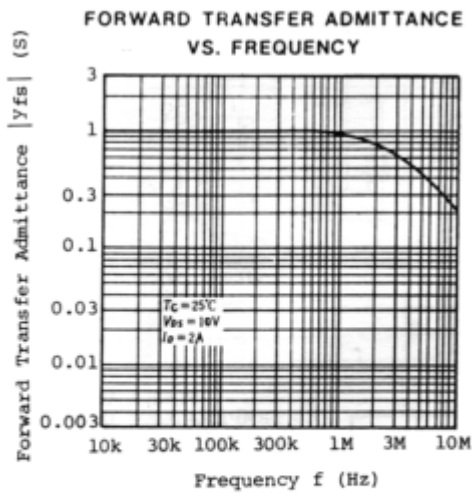
Item	Symbol	Test Condition	min.	typ.	max.	Unit
Drain-Source Breakdown Voltage	K133	I _D =10mA, V _{GS} =-10V	120	-	-	V
	K134		140	-	-	V
	K135		160	-	-	V
Gate-Source Breakdown Voltage	V _{(BR)GSS}	I _G =±100µA, V _{DS} =0	±14	-	-	V
Gate-Source Cutoff Voltage	V _{GS(off)}	I _D =100mA, V _{DS} =10V	0.15	-	1.45	V
Drain-Source Saturation Voltage	V _{DS(sat)}	I _D =7A, V _{GD} =0*	-	-	12	V
Forward Transfer Admittance	y _{fs}	I _D =3A, V _{DS} =10V*	0.7	1.0	1.4	S
Input Capacitance	C _{iss}	V _{GS} =-5V, V _{DS} =10V, f=1MHz	-	600	-	pF
Output Capacitance	C _{oss}		-	350	-	pF
Reverse Transfer Capacitance	C _{rss}		-	10	-	pF
Turn-on Time	t _{on}	V _{DD} =20V, I _D =4A	-	180	-	ns
Turn-off Time	t _{off}		-	60	-	ns

*Pulse Test

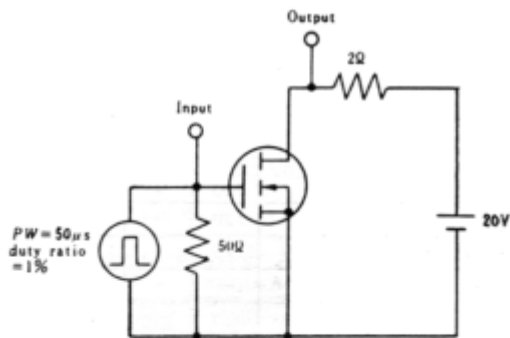
2SK133,2SK134,2SK135



2SK133,2SK134,2SK135



SWITCHING TIME TEST CIRCUIT



RESPONSE WAVEFORM

