

P-Channel MOSFET Transistor

2SJ100 / J100

160V / 8A

DATASHEET

OEM – Hitachi

Source: Hitachi Databook Power Mosfet Data 4/83

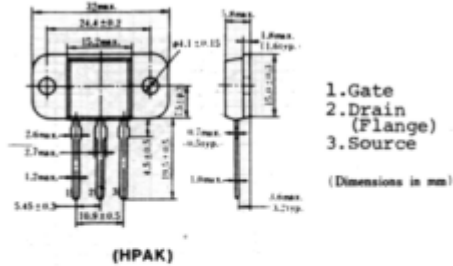
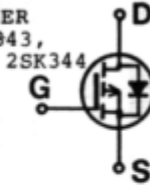
2SJ99 , 2SJ100

SILICON P-CHANNEL MOS FET

HIGH SPEED POWER SWITCHING
 LOW FREQUENCY POWER AMPLIFIER
 Complementary pair with 2SK343,

Features:

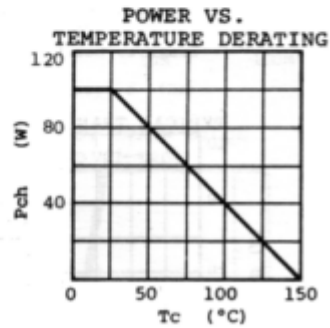
- Low On-Resistance.
- High Speed Switching.
- No Secondary Breakdown.
- Good Complementary Characteristics.



ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Item	Symbol	J99	J100	Unit
Drain-Source Voltage	V _{DSS}	-140	-160	V
Gate-Source Voltage	V _{GSS}	±20		V
Drain Current	I _D	-8		A
Drain Peak Current	I _{D(peak)}	-12		A
Body-Drain Diode Reverse Drain Current	I _{DR}	-8		A
Channel Dissipation	P _{ch} *	100		W
Channel Temperature	T _{ch}	150		°C
Storage Temperature	T _{stg}	-55 ~ +150		°C

*Value at T_c=25°C



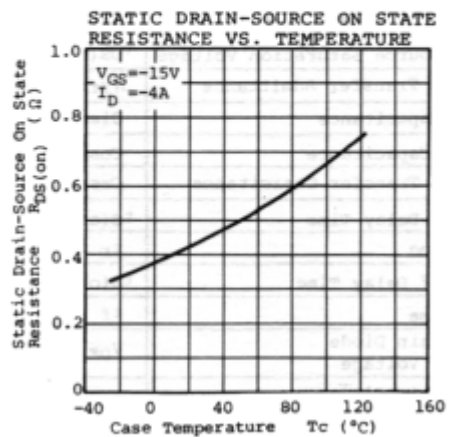
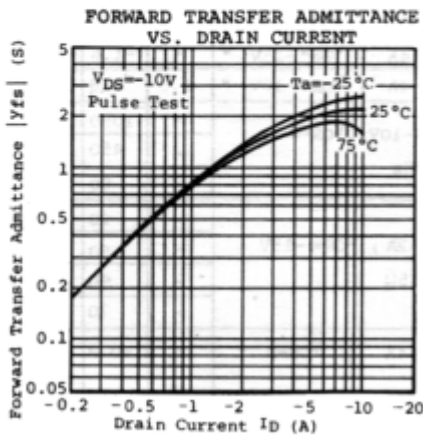
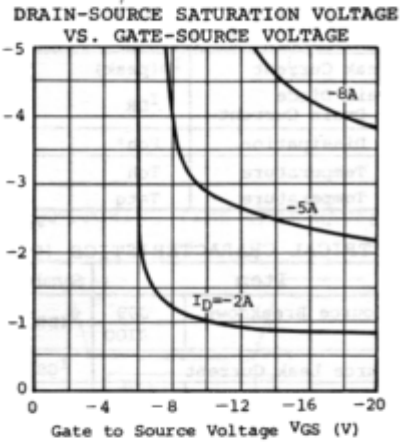
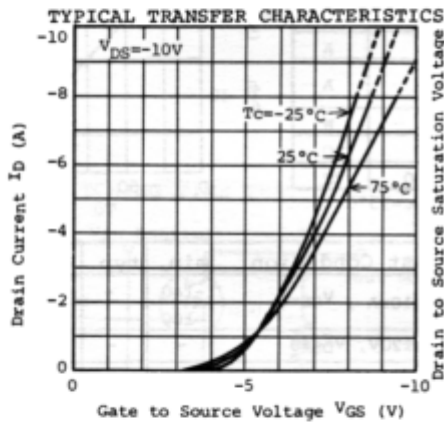
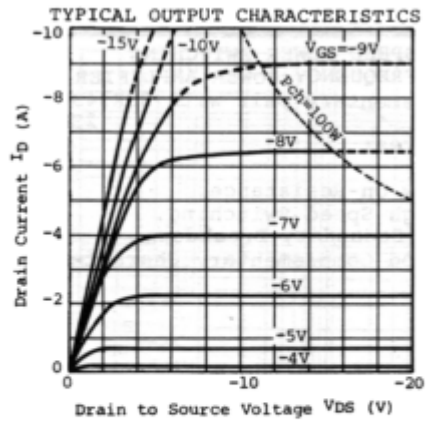
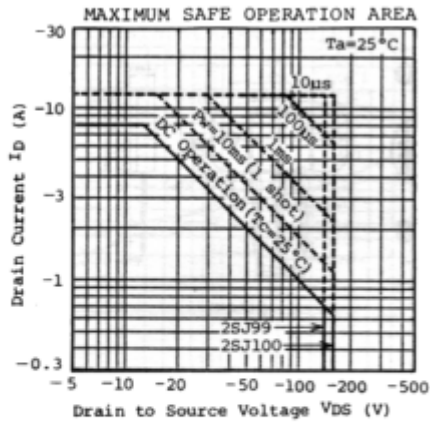
ELECTRICAL CHARACTERISTICS (Ta=25°C)

Item	Symbol	Test Condition	min.	typ.	max.	Unit
Drain-Source Breakdown Voltage	J99	I _D =-10mA, V _{GS} =0	-140	-	-	V
	J100		-160	-	-	V
Gate-Source Leak Current	I _{GSS}	V _{GS} =±20V, V _{DS} =0	-	-	±1	µA
Zero Gate Voltage Drain Current	J99	V _{DS} =-120V, V _{GS} =0	-	-	-1	mA
	J100		V _{DS} =-140V, V _{GS} =0	-	-	-1
Gate-Source Cutoff Voltage	V _{GS(off)}	I _D =-1mA, V _{DS} =-10V	-2.0	-	-5.0	V
Static Drain-Source On State Resistance	R _{DS(on)}	I _D =-4A, V _{GS} =-15V *	-	0.4	0.5	Ω
Drain-Source Saturation Voltage	V _{DS(on)}	I _D =-4A, V _{GS} =-15V *	-	-1.6	-2.0	V
Forward Transfer Admittance	y _{fs}	I _D =-4A, V _{DS} =-10V *	1.0	1.8	-	S
Input Capacitance	C _{iss}	V _{DS} =-10V, V _{GS} =0 f=1MHz	-	1050	-	pF
Output Capacitance	C _{oss}		-	450	-	pF
Reverse Transfer Capacitance	C _{rss}		-	80	-	pF
Turn-On Delay Time	t _{d(on)}	I _D =-2A, V _{GS} =-15V R _L =15Ω	-	20	-	ns
Rise Time	t _r		-	50	-	ns
Turn-Off Delay Time	t _{d(off)}		-	90	-	ns
Fall Time	t _f		-	70	-	ns
Body-Drain Diode Forward Voltage	V _{DF}		I _F =-4A, V _{GS} =0	-	-0.9	-
Body-Drain Diode Reverse Recovery Time	t _{rr}	I _F =-4A, V _{GS} =0	-	350	-	ns



*Pulse Test

2SJ99,2SJ100



2SJ99,2SJ100

