

506-473

Silicon P-Channel MOS FET

## Application

Low frequency power amplifier  
Complementary pair with 2SK2220  
2SK2221

## 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

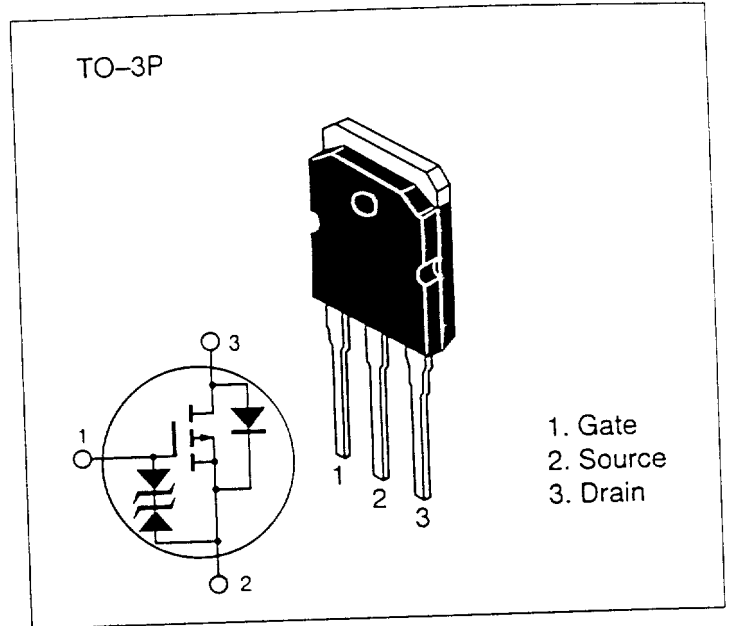
**Table 1 Ordering Information**

Type No.	V <sub>DSS</sub>
2SJ351	-180 V
2SJ352	-200 V

**Table 2 Absolute Maximum Ratings (Ta = 25°C)**

Item	Symbol	Ratings	Unit
Drain to source voltage	V <sub>DSX</sub>	-180	V
		-200	
Gate to source voltage	V <sub>GSS</sub>	±20	V
Drain current	I <sub>D</sub>	-8	A
Body-drain diode reverse drain current	I <sub>DR</sub>	-8	A
Channel dissipation	P <sub>ch</sub> *	100	W
Channel temperature	T <sub>ch</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55 to +150	°C

\* Value at T<sub>c</sub> = 25 °C



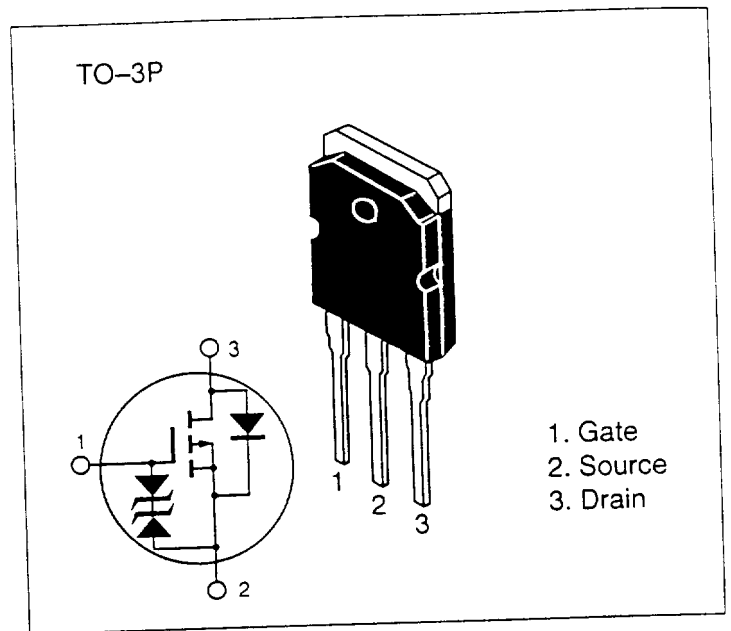
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Table 3 Electrical Characteristics ( $T_a = 25^\circ\text{C}$ )

Item		Symbol	Min	Typ	Max	Unit	Test conditions
Drain to source breakdown voltage	2SJ351	$V_{(BR)DSX}$	-180	—	—	V	$I_D = -10\text{ mA}$ , $V_{GS} = 10\text{ V}$
	2SJ352		-200	—	—		
Gate to source breakdown voltage		$V_{(BR)GSS}$	$\pm 20$	—	—	V	$I_G = \pm 100\ \mu\text{A}$ , $V_{DS} = 0$
Gate to source cutoff voltage		$V_{GS(off)}$	-0.15	—	-1.45	V	$I_D = -100\text{ mA}$ $V_{DS} = -10\text{ V}$
Drain to source saturation voltage		$V_{DS(sat)}$	—	—	-12	V	$I_D = -8\text{ A}$ , $V_{GD} = 0\text{ V}^*$
Forward transfer admittance		$ y_{fs} $	0.7	1.0	1.4	S	$I_D = -3\text{ A}$ $V_{DS} = -10\text{ V}^*$
Input capacitance		$C_{iss}$	—	1000	—	pF	$V_{GS} = 5\text{ V}$
Output capacitance		$C_{oss}$	—	470	—	pF	$V_{DS} = -10\text{ V}$
Reverse transfer capacitance		$C_{rss}$	—	50	—	pF	$f = 1\text{ MHz}$
Turn-on time		$t_{on}$	—	320	—	ns	$V_{DD} = -30\text{ V}$
Turn-off time		$t_{off}$	—	120	—	ns	$I_D = -4\text{ A}$

\* Pulse Test

