



2SJ351, 2SJ352

Silicon P Channel MOS FET

REJ03G0860-0200
(Previous: ADE-208-1193)
Rev.2.00
Sep 07, 2005

Description

Low frequency power amplifier

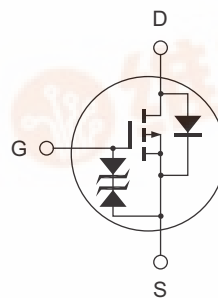
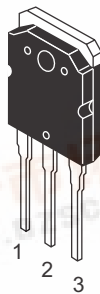
Complementary pair with 2SK2220, 2SK2221

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

Outline

RENESAS Package code: PRSS0004ZE-A
(Package name: TO-3P)



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

Absolute Maximum Ratings

(Ta = 25°C)

Item		Symbol	Value	Unit
Drain to source voltage	2SJ351	V_{DSX}	-180	V
	2SJ352		-200	
Gate to source voltage		V_{GSS}	±20	V
Drain current		I_D	-8	A
Body to drain diode reverse drain current		I_{DR}	-8	A
Channel dissipation		P_{ch} ^{Note 1}	100	W
Channel temperature		T_{ch}	150	°C
Storage temperature		T_{stg}	-55 to +150	°C

Note: 1. Value at Tc = 25°C

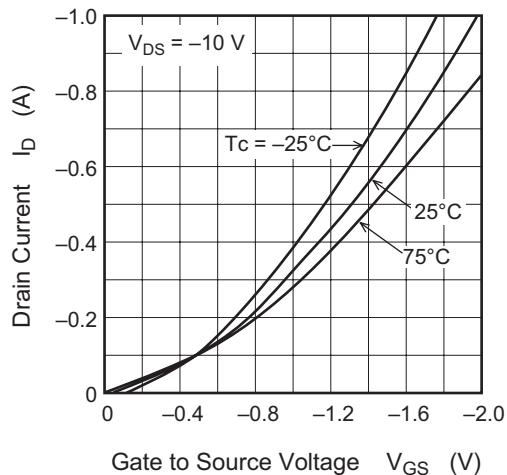
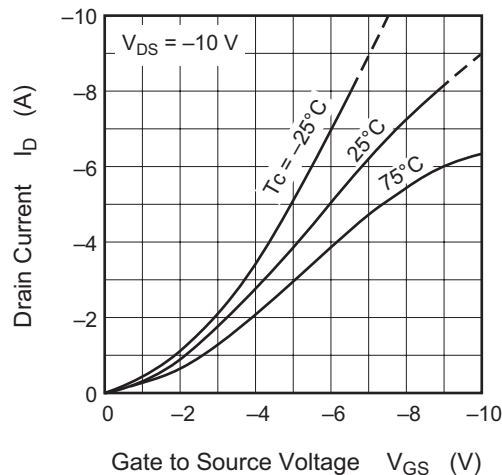
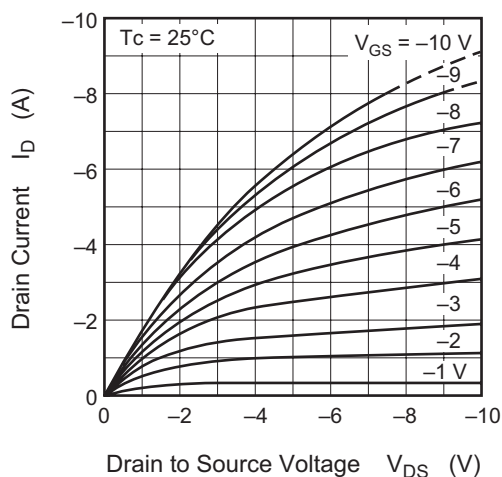
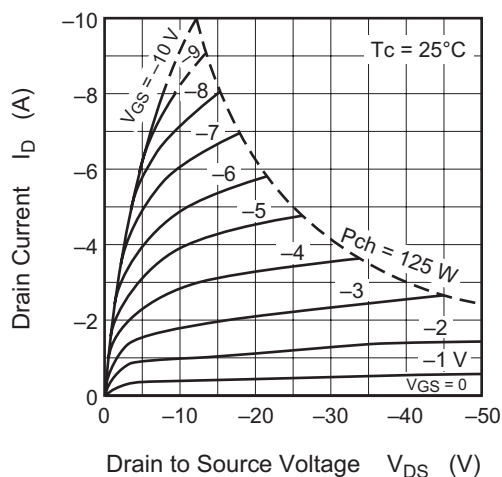
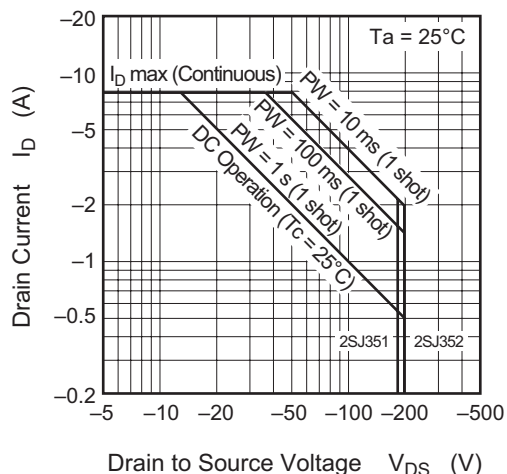
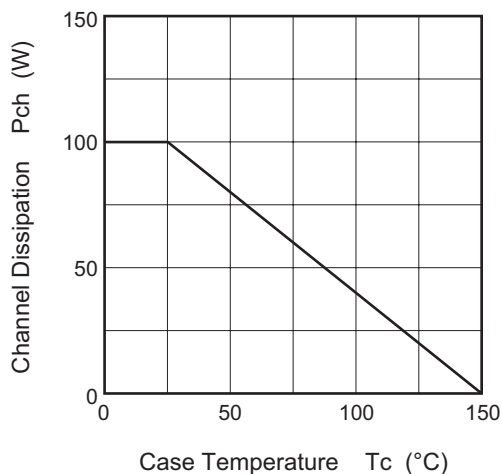
Electrical Characteristics

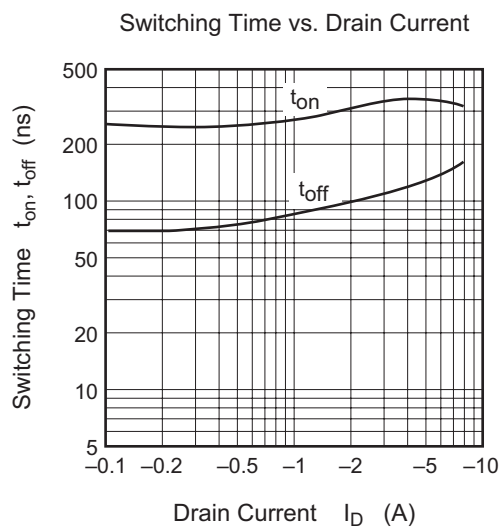
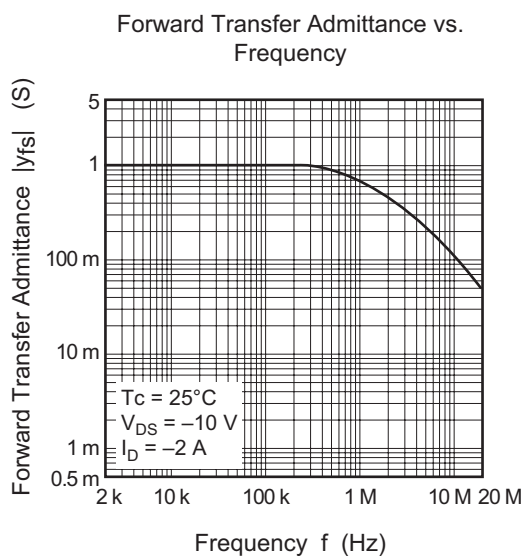
(Ta = 25°C)

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	—	—	V	
Gate to source breakdown voltage		$V_{(BR)GSS}$	±20	—	—	V	$I_G = \pm 100\text{ }\mu\text{A}$, $V_{DS} = 0$
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	$I_D = -8\text{ A}$, $V_{GS} = 0$ ^{Note 2}
Forward transfer admittance		$ y_{fs} $	0.7	1.0	1.4	S	$I_D = -3\text{ A}$, $V_{DS} = -10\text{ V}$ ^{Note 2}
Input capacitance		C_{iss}	—	800	—	pF	$V_{GS} = 5\text{ V}$, $V_{DS} = -10\text{ V}$, $f = 1\text{ MHz}$
Output capacitance		C_{oss}	—	1000	—	pF	
Reverse transfer capacitance		C_{rss}	—	18	—	pF	
Turn-on time		t_{on}	—	320	—	ns	$V_{DD} = -30\text{ V}$, $I_D = -4\text{ A}$
Turn-off time		t_{off}	—	120	—	ns	

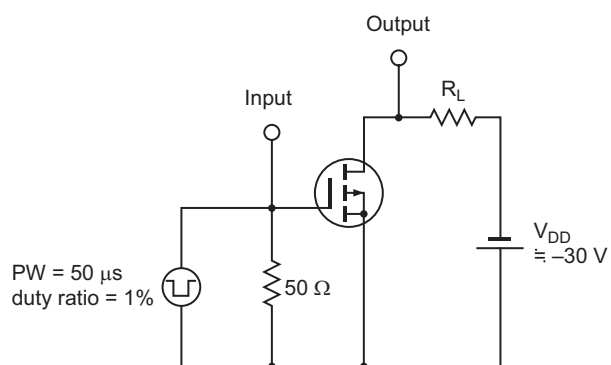
Note: 2. Pulse test

Main Characteristics

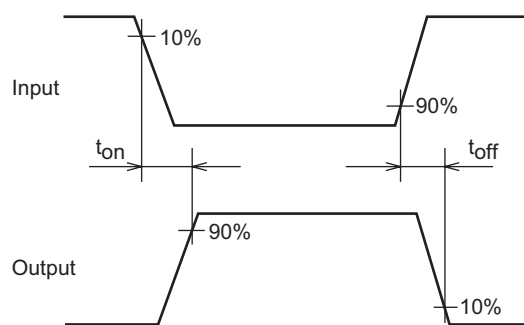




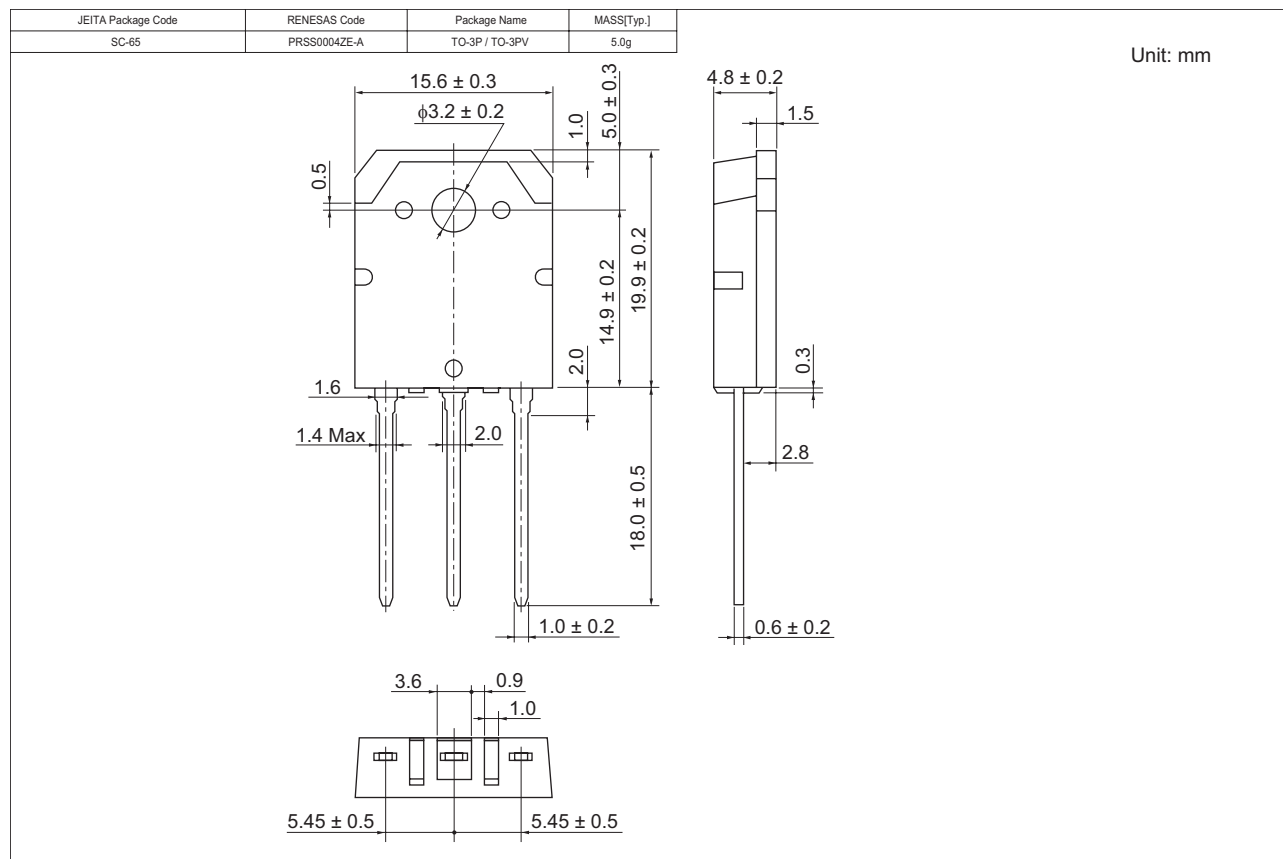
Switching Time Test Circuit



Waveform



Package Dimensions



Ordering Information

Part Name	Quantity	Shipping Container
2SJ351-E	360 pcs	Box (Tube)
2SJ352-E	360 pcs	Box (Tube)

Note: For some grades, production may be terminated. Please contact the Renesas sales office to check the state of production before ordering the product.

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