

# 2SK213, 2SK214, 2SK215, 2SK216

Silicon N Channel MOS FET

REJ03G0903-0200  
(Previous: ADE-208-1241)  
Rev.2.00  
Sep 07, 2005

## Application

High frequency and low frequency power amplifier, high speed switching.

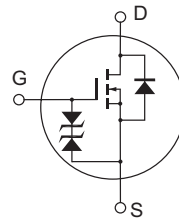
Complementary pair with 2SJ76, J77, J78, J79

## Features

- Suitable for direct mounting
- High forward transfer admittance
- Excellent frequency response
- Enhancement-mode

## Outline

RENESAS Package code: PRSS0004AC-A  
(Package name: TO-220AB)



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

## Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Ratings	Unit
Drain to source voltage	2SK213	140	V
	2SK214	160	
	2SK215	180	
	2SK216	200	
Gate to source voltage	V <sub>GSS</sub>	±15	V
Drain current	I <sub>D</sub>	500	mA
Body to drain diode reverse drain current	I <sub>DR</sub>	500	mA
Channel dissipation	P <sub>ch</sub>	1.75	W
	P <sub>ch</sub> <sup>*1</sup>	30	W
Channel temperature	T <sub>ch</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-45 to +150	°C

Note: 1. Value at T<sub>C</sub> = 25°C

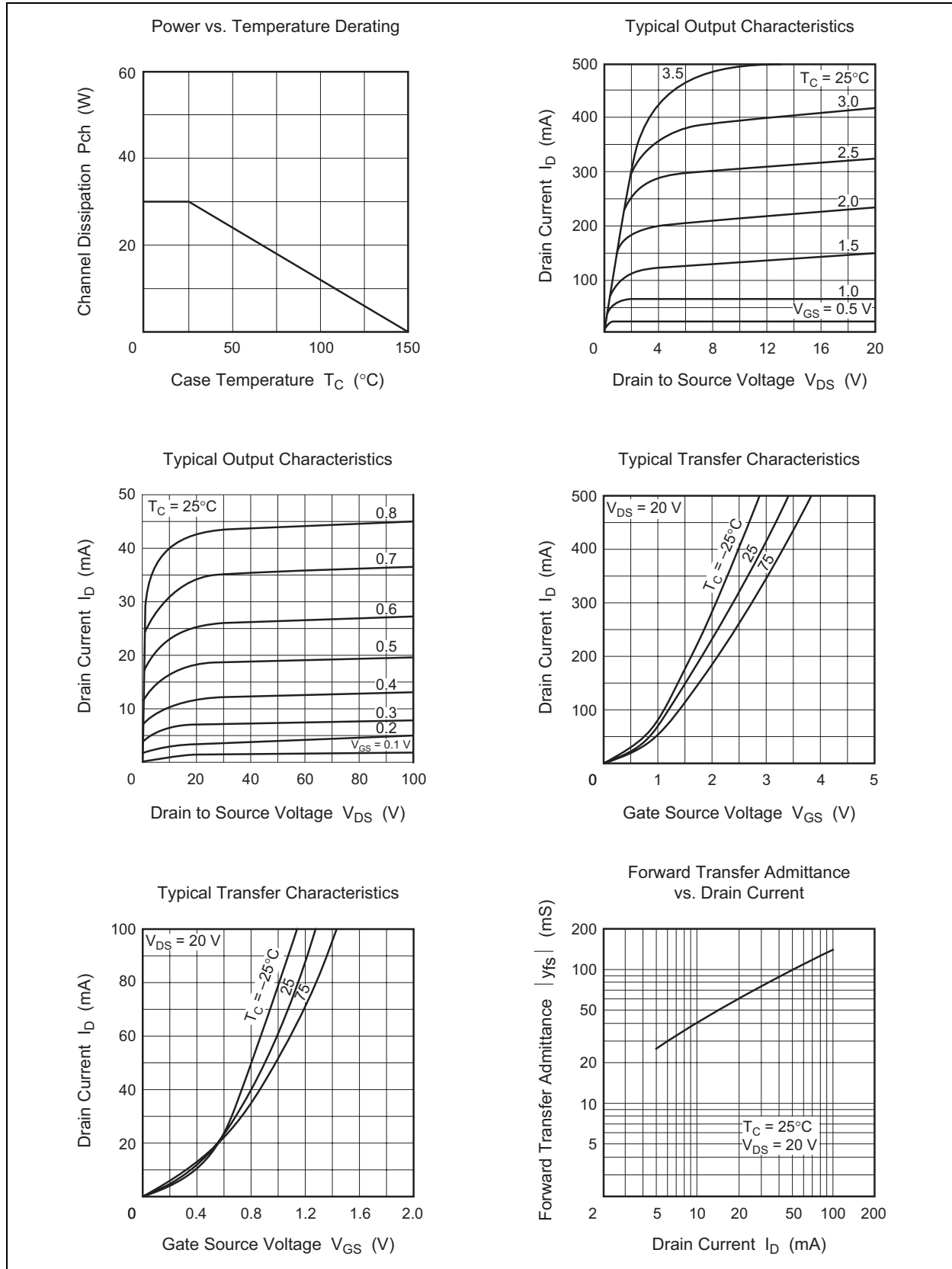
## Electrical Characteristics

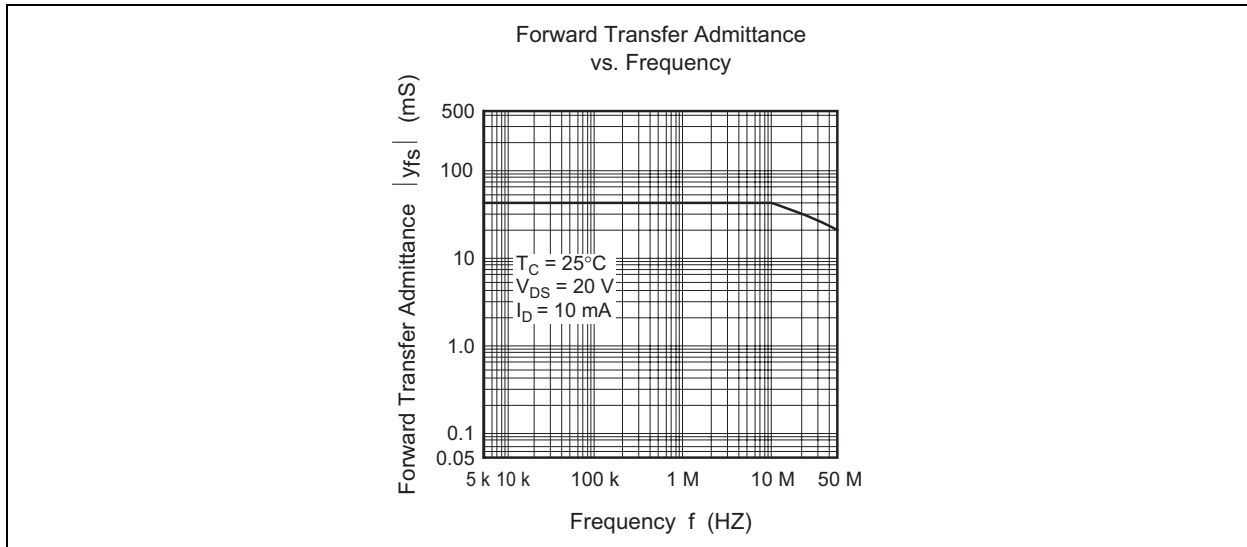
(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test conditions
Drain to source breakdown voltage	2SK213	140	—	—	V	I <sub>D</sub> = 1 mA, V <sub>GS</sub> = -2 V
	2SK214	160	—	—	V	
	2SK215	180	—	—	V	
	2SK216	200	—	—	V	
Gate to source breakdown voltage	V <sub>(BR)GSS</sub>	±15	—	—	V	I <sub>G</sub> = ±10 μA, V <sub>DS</sub> = 0
Gate to source voltage	V <sub>GS(on)</sub>	0.2	—	1.5	V	I <sub>D</sub> = 10 mA, V <sub>DS</sub> = 10 V <sup>*2</sup>
Drain to source saturation voltage	V <sub>DS(sat)</sub>	—	—	2.0	V	I <sub>D</sub> = 10 mA, V <sub>GD</sub> = 0 <sup>*2</sup>
Forward transfer admittance	y <sub>fs</sub>	20	40	—	mS	I <sub>D</sub> = 10 mA, V <sub>DS</sub> = 20 V <sup>*2</sup>
Input capacitance	C <sub>iss</sub>	—	90	—	pF	I <sub>D</sub> = 10 mA, V <sub>DS</sub> = 10 V, f = 1 MHz
Reverse transfer capacitance	C <sub>rss</sub>	—	2.2	—	pF	

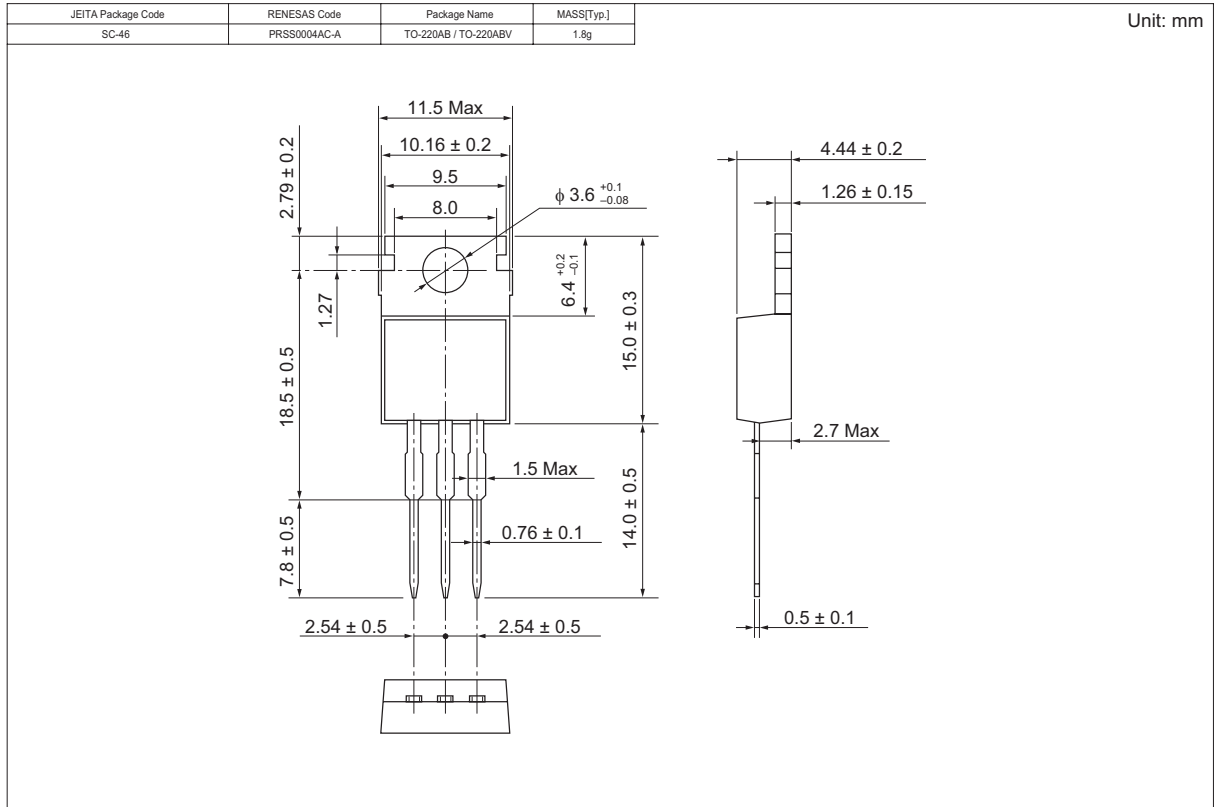
Note: 2. Pulse test

### Main Characteristics





## Package Dimensions



## Ordering Information

Part Name	Quantity	Shipping Container
2SK213-E	500 pcs	Box (Sack)
2SK214-E	500 pcs	Box (Sack)
2SK215-E	500 pcs	Box (Sack)
2SK216-E	500 pcs	Box (Sack)

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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