

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.

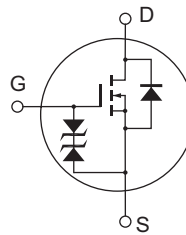
Complementary pair with 2SJ76, J77, J78, J79

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	V_{DSX}	140	V
		160	
		180	
		200	
Gate to source voltage	V_{GSS}	±15	V
Drain current	I_D	500	mA
Body to drain diode reverse drain current	I_{DR}	500	mA
Channel dissipation	Pch	1.75	W
	Pch^{*1}	30	W
Channel temperature	Tch	150	°C
Storage temperature	Tstg	-45 to +150	°C

Note: 1. Value at $T_C = 25^\circ\text{C}$

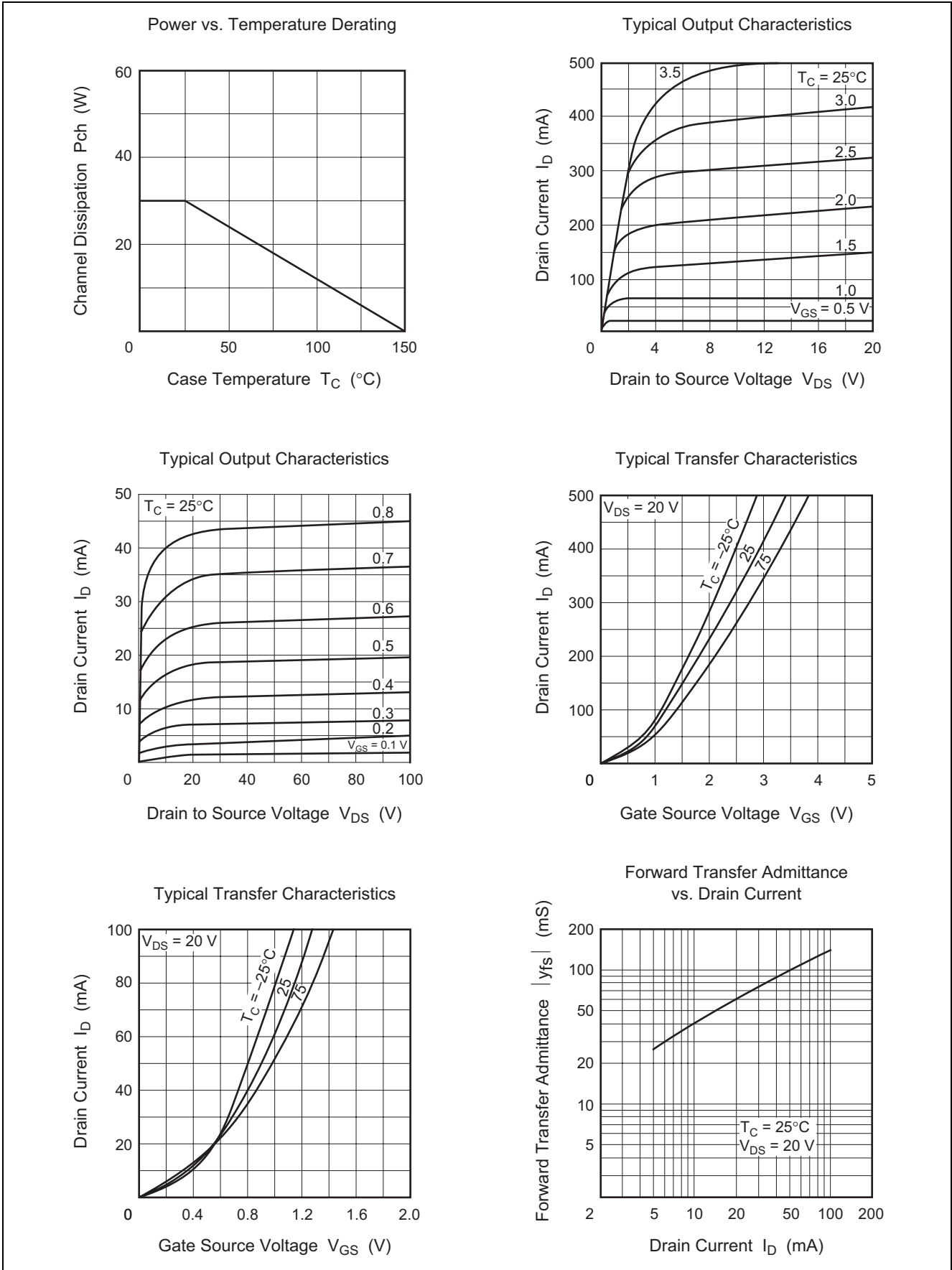
Electrical Characteristics

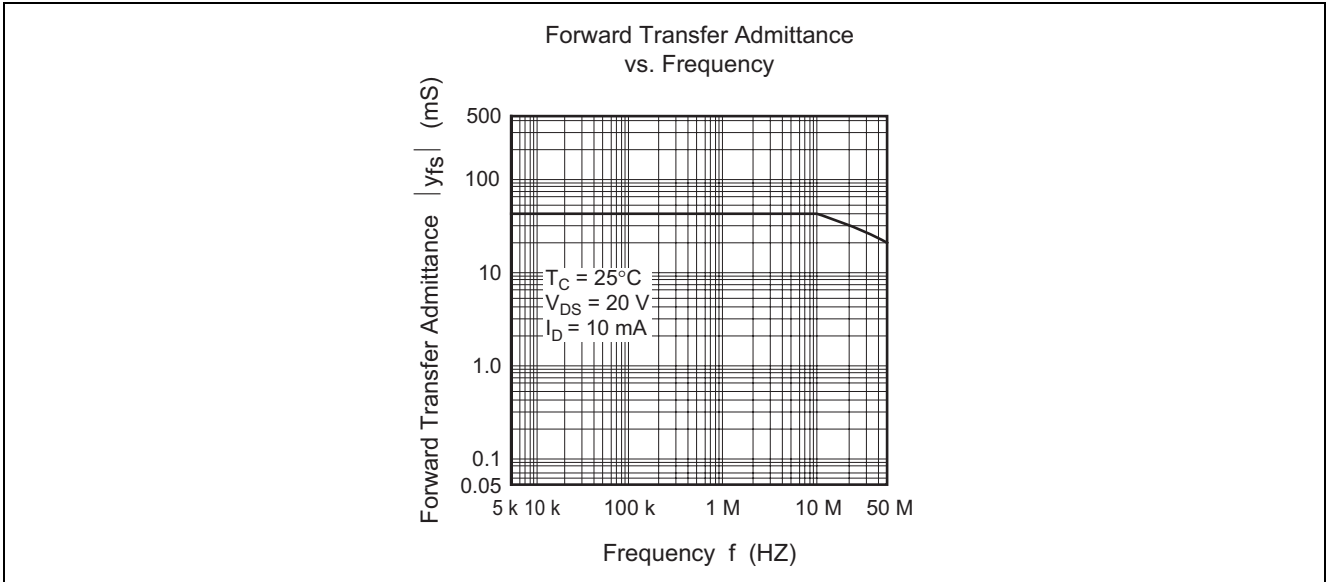
(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test conditions
Drain to source breakdown voltage	$V_{(BR)DSX}$	140	—	—	V	$I_D = 1 \text{ mA}, V_{GS} = -2 \text{ V}$
		160	—	—	V	
		180	—	—	V	
		200	—	—	V	
Gate to source breakdown voltage	$V_{(BR)GSS}$	±15	—	—	V	$I_G = \pm 10 \mu\text{A}, V_{DS} = 0$
Gate to source voltage	$V_{GS(on)}$	0.2	—	1.5	V	$I_D = 10 \text{ mA}, V_{DS} = 10 \text{ V}^{*2}$
Drain to source saturation voltage	$V_{DS(sat)}$	—	—	2.0	V	$I_D = 10 \text{ mA}, V_{GD} = 0^{*2}$
Forward transfer admittance	$ y_{fs} $	20	40	—	mS	$I_D = 10 \text{ mA}, V_{DS} = 20 \text{ V}^{*2}$
Input capacitance	Ciss	—	90	—	pF	$I_D = 10 \text{ mA}, V_{DS} = 10 \text{ V},$ $f = 1 \text{ MHz}$
Reverse transfer capacitance	Crss	—	2.2	—	pF	

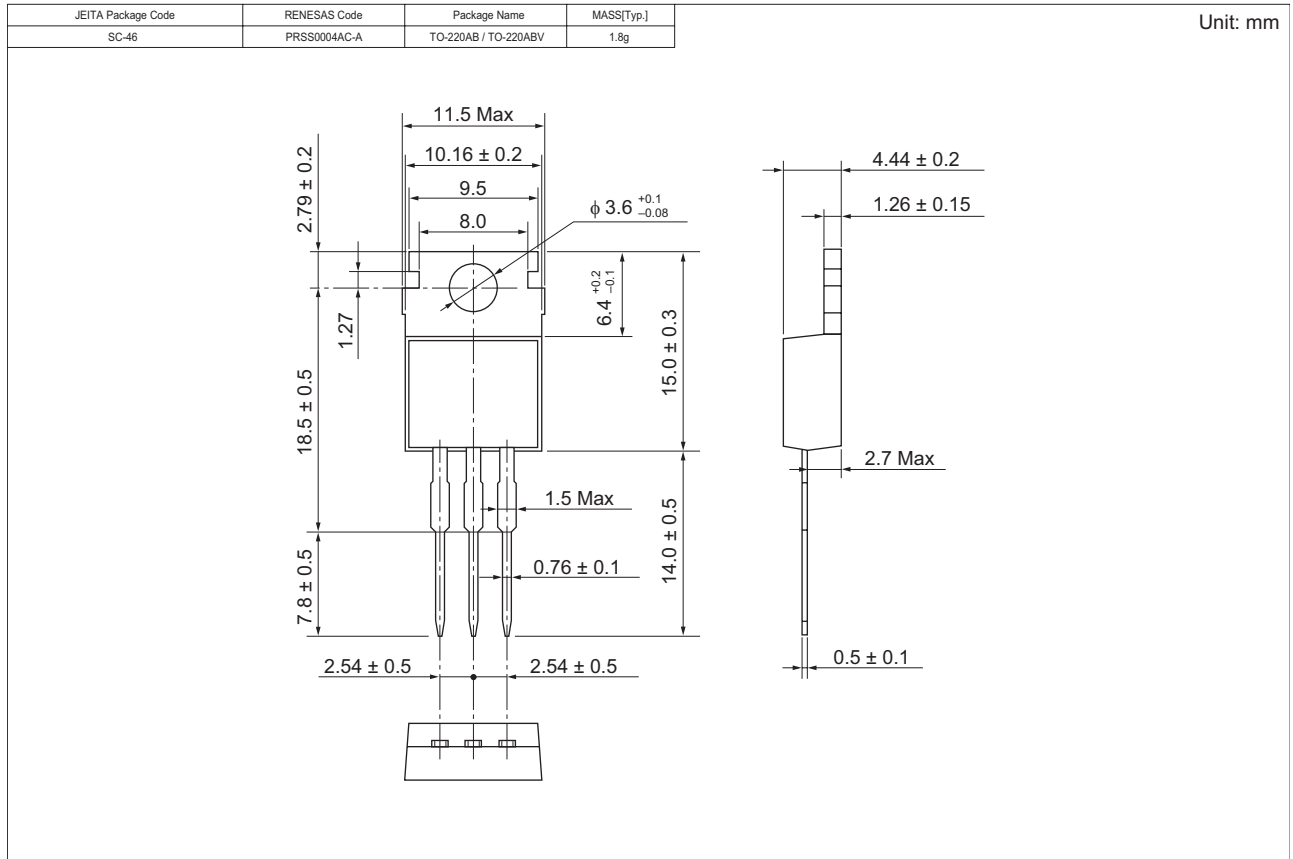
Note: 2. Pulse test

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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