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Renesas Electronics website: http://www.renesas.com

April 1st, 2010 Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (http://www.renesas.com)

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2SK213, 2SK214, 2SK215, 2SK216

Silicon N Channel MOS FET

REJ03G0903-0200

(Previous: ADE-208-1241)

Rev.2.00 Sep 07, 2005

Application

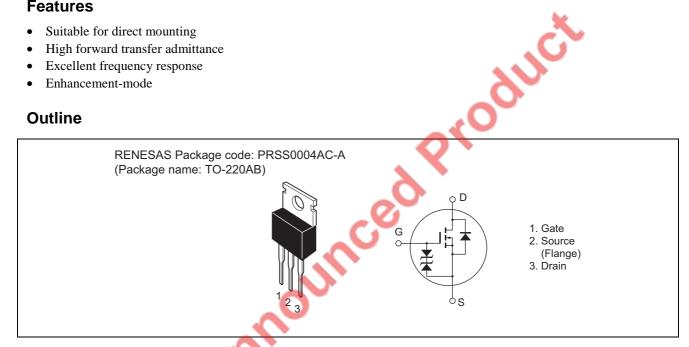
High frequency and low frequency power amplifier, high speed switching.

Complementary pair with 2SJ76, J77, J78, J79

Features

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

Outline



Absolute Maximum Ratings

 $(Ta = 25^{\circ}C)$

Item		Symbol	Ratings	Unit	
Drain to source voltage	2SK213	V _{DSX}	140	V	
	2SK214		160		
	2SK215		180		
	2SK216		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 $T_C = 25$ °C

Electrical Characteristics

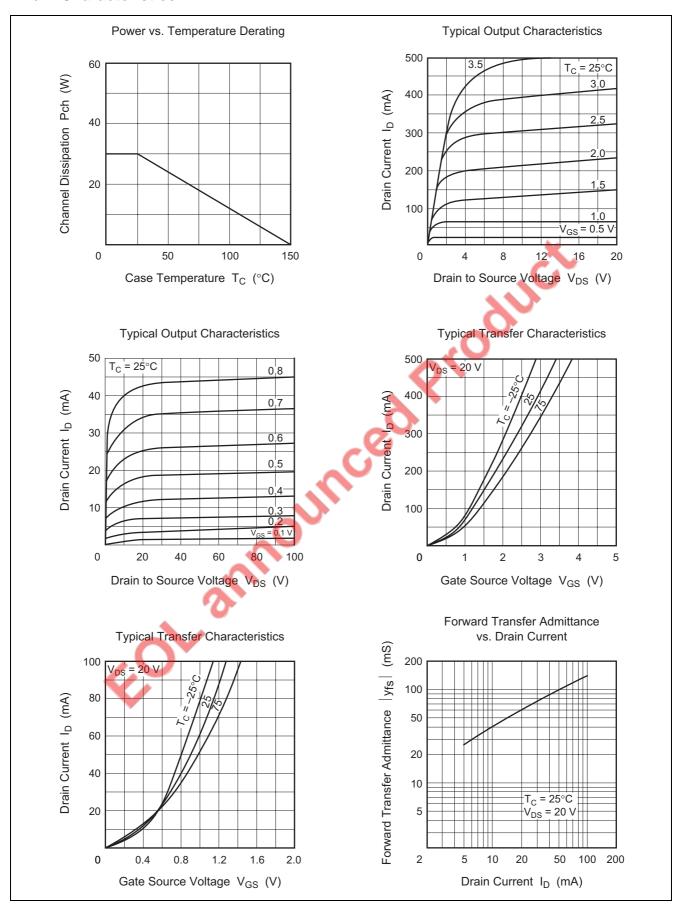
 $(Ta = 25^{\circ}C)$

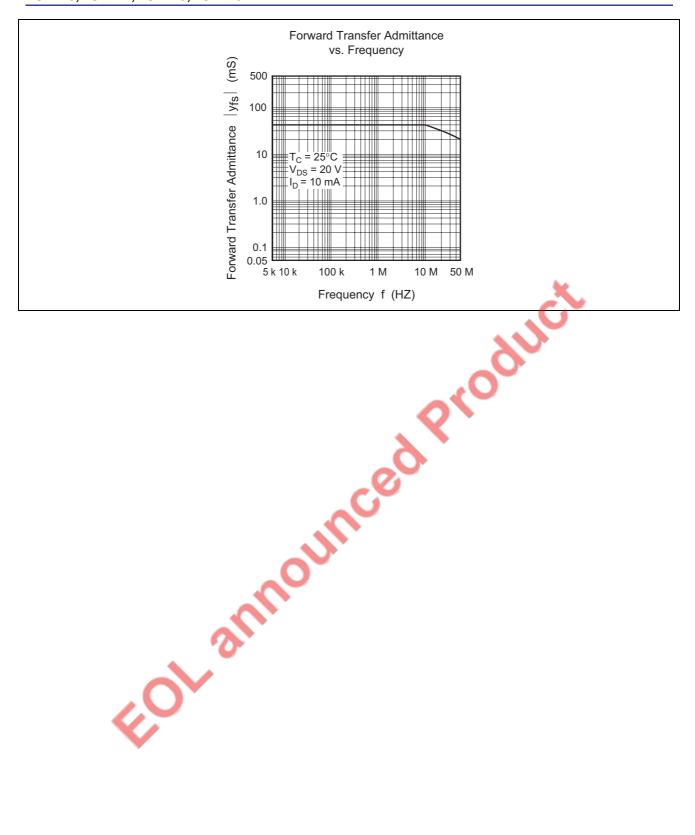
Item		Symbol	Min	Тур	Max	Unit	Test conditions
Drain to source breakdown	2SK213	$V_{(BR)DSX}$	140	_		V	$I_D = 1 \text{ mA}, V_{GS} = -2 \text{ V}$
voltage	2SK214		160	_		V	
	2SK215		180	- 4		V	
	2SK216		200	- 2	_	V	
Gate to source breakdown voltage		$V_{(BR)GSS}$	±15		<i>J</i> -	V	$I_G = \pm 10 \ \mu A, \ V_{DS} = 0$
Gate to source voltage		V _{GS(on)}	0.2	. W	1.5	V	$I_D = 10 \text{ mA}, V_{DS} = 10 \text{ V}^{*2}$
Drain to source saturation voltage		V _{DS(sat)}		<u>J</u>	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	$I_D = 10 \text{ mA}, V_{DS} = 10 \text{ V},$
Reverse transfer capacitance		Crss	O.	2.2	_	pF	f = 1 MHz
Note: 2. Pulse test							



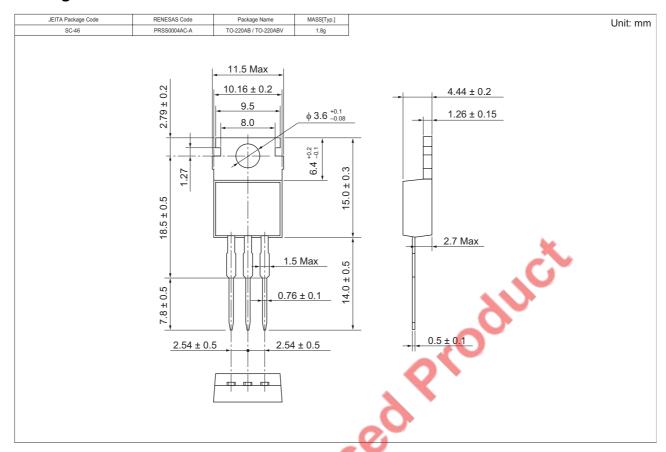


Main Characteristics





Package Dimensions



Ordering Information

Part Name	Quantity	Shipping Co	ontainer
2SK213-E	500 pcs	x (Sack)	
2SK214-E	500 pcs	x (Sack)	
2SK215-E	500 pcs	x (Sack)	
2SK216-E	500 pcs	x (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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