

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

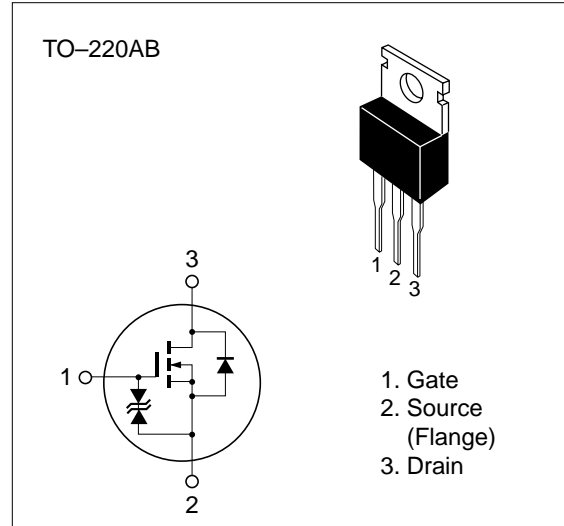
### Silicon N-Channel MOS FET

#### 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



**Table 1 Absolute Maximum Ratings** ( $T_a = 25^\circ\text{C}$ )

Item		Symbol	Ratings	Unit
Drain to source voltage	2SK213	$V_{DSX}$	140	V
	2SK214		160	
	2SK215		180	
	2SK216		200	
Gate to source voltage		$V_{GSS}$	$\pm 15$	V
Drain current		$I_D$	500	mA
Body to drain diode reverse drain current		$I_{DR}$	500	mA
Channel dissipation		$P_{ch}$	1.75	W
		$P_{ch}^*$	30	W
Channel temperature		$T_{ch}$	150	$^\circ\text{C}$
Storage temperature		$T_{stg}$	-45 to +150	$^\circ\text{C}$

\* Value at  $T_C = 25^\circ\text{C}$

**Table 2 Electrical Characteristics** (Ta = 25°C)

Item		Symbol	Min	Typ	Max	Unit	Test conditions
Drain to source breakdown voltage	2SK213	$V_{(BR)DSX}$	140	—	—	V	$I_D = 1 \text{ mA}, V_{GS} = -2 \text{ V}$
	2SK214		160	—	—	V	
	2SK215		180	—	—	V	
	2SK216		200	—	—	V	
Gate to source breakdown voltage		$V_{(BR)GSS}$	±15	—	—	V	$I_G = \pm 10 \text{ } \mu\text{A}, V_{DS} = 0$
Gate to source voltage		$V_{GS(on)}$	0.2	—	1.5	V	$I_D = 10 \text{ mA}, V_{DS} = 10 \text{ V}^*$
Drain to source saturation voltage		$V_{DS(sat)}$	—	—	2.0	V	$I_D = 10 \text{ mA}, V_{GD} = 0^*$
Forward transfer admittance		$ y_{fs} $	20	40	—	mS	$I_D = 10 \text{ mA}, V_{DS} = 20 \text{ V}^*$
Input capacitance		Ciss	—	90	—	pF	$I_D = 10 \text{ mA}, V_{DS} = 10 \text{ V},$
Reverse transfer capacitance		Crss	—	2.2	—	pF	$f = 1 \text{ MHz}$

\* Pulse Test

