## 2SK360

## Silicon N-Channel MOS FET

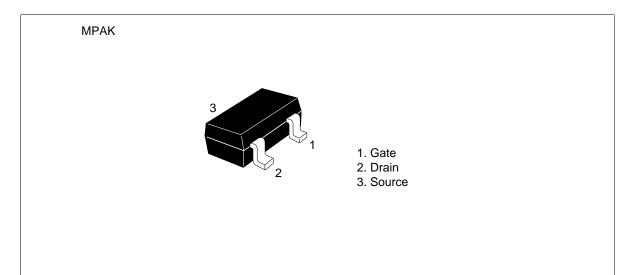
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ADE-208-1170 (Z) 1st. Edition Mar. 2001

#### Application

VHF amplifier

#### Outline





### 2SK360

#### **Absolute Maximum Ratings** (Ta = $25^{\circ}$ C)

Item	Symbol	Ratings	Unit	
Drain to source voltage	V <sub>DSX</sub> *1	20	V	
Gate to source voltage	V <sub>GSS</sub>	±5	V	
Drain current	Ι <sub>D</sub>	30	mA	
Gate current	Ι <sub>G</sub>	±1	mA	
Channel power dissipation	Pch	150	mW	
Channel temperature	Tch	150	°C	
Storage temperature	Tstg	-55 to +150	°C	

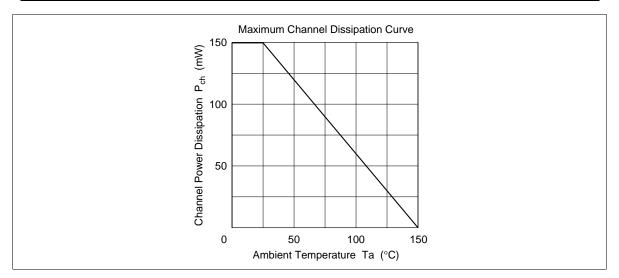
Note: 1.  $V_{GS} = -4 V$ 

#### **Electrical Characteristics** (Ta = 25°C)

ltem		Symbol	Min	Тур	Max	Unit	Test conditions
Drain to so voltage	ource breakdown	$V_{(\text{BR})\text{DSX}}$	20	_	_	V	$I_{\scriptscriptstyle D}=100~\mu A,~V_{\scriptscriptstyle GS}=-4~V$
Gate cutor	f current	I <sub>GSS</sub>	—		±20	nA	$V_{GS} = \pm 5 \text{ V}, \text{ V}_{DS} = 0$
Drain curr	ent	l <sub>DSS</sub> *1	4		12	mA	$V_{DS} = 10 \text{ V}, \text{ V}_{GS} = 0$
Gate to so	ource cutoff voltage	e V <sub>GS(off)</sub>	0	—	-2.0	V	$V_{\text{DS}} = 10 \text{ V}, \text{ I}_{\text{D}} = 10 \mu\text{A}$
Forward tr	ansfer admittance		8	14	_	mS	$V_{DS} = 10 V, V_{GS} = 0,$ f = 1 kHz
Input capa	icitance	Ciss	—	2.5	—	pF	$V_{DS} = 10 V, V_{GS} = 0,$ f = 1 MHz
Output capacitance		Coss	_	1.6	_	pF	
Reverse transfer capacitance		e Crss	_	0.03	_	pF	_
Power gain		PG	_	30	—	dB	$V_{DS} = 10 \text{ V}, V_{GS} = 0,$ f = 100 MHz
Noise figu	re	NF	_	2.0	_	dB	
Note: 1.	The 2SK360 is g	rouped by I <sub>DS</sub>	<sub>s</sub> as follo	WS.			
Grade	D	E	F				
Mark	IGD	IGE	IGF				
I <sub>DSS</sub>	4 to 8	6 to 10	8 to 12				

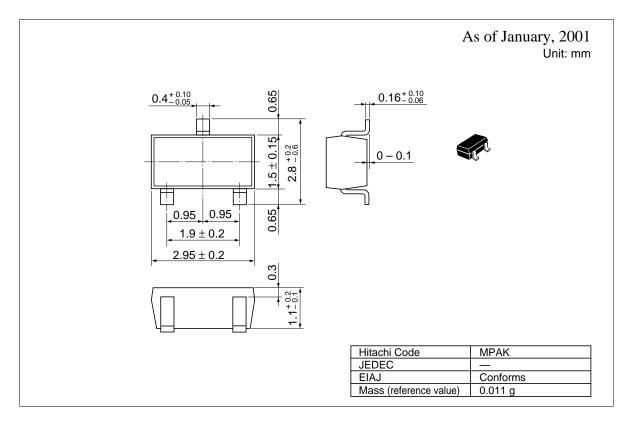
See characteristic curves of 2SK359.

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#### 2SK360

#### **Package Dimensions**



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