TOSHIBA 2SK2162

#### TOSHIBA FIELD EFFECT TRANSISTOR SILICON N CHANNEL MOS TYPE

# 2 S K 2 1 6 2

## AUDIO FREQUENCY POWER AMPLIFIER APPLICATION

High Breakdown Voltage :  $V_{DSS} = 180 V$ 

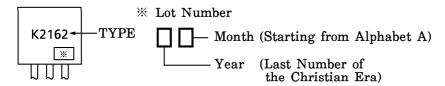
High Forward Transfer Admittance :  $|Y_{fS}| = 0.7 \text{ S}$  (Typ.)

Complementary to 2SJ338

#### MAXIMUM RATINGS (Ta = 25°C)

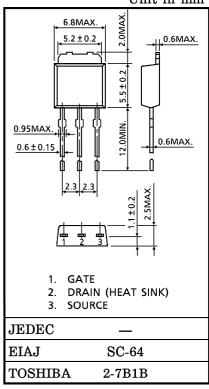
CHARACTERISTIC	SYMBOL	RATING	UNIT
Drain-Source Voltage	$v_{ m DSS}$	180	V
Gate-Source Voltage	$v_{ m GSS}$	±20	V
Drain Current	${ m I}_{ m D}$	1	A
Power Dissipation (Tc = 25°C)	$P_{\mathbf{D}}$	20	W
Channel Temperature	$\mathrm{T_{ch}}$	150	$^{\circ}\mathrm{C}$
Storage Temperature Range	$\mathrm{T_{stg}}$	-55~150	°C

#### **MARKING**



# ELECTRICAL CHARACTERISTICS (Ta = 25°C)

### INDUSTRIAL APPLICATIONS Unit in mm



Weight: 0.36 g

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Gate Leakage Current	$I_{ m GSS}$	$V_{DS} = 0, V_{GS} = \pm 20 V$	_	_	±100	nA
Drain-Source Breakdown Voltage	V (BR) DSS	$I_{D} = 10 \text{ mA}, V_{GS} = 0 \text{ V}$	180	_	_	V
Gate -Source Cut-off Current	V <sub>GS</sub> (OFF)	$V_{DS} = 10 \text{ V}, I_{D} = 10 \text{ mA}$	1.4	_	2.8	V
Drain-Source Saturation Voltage	V <sub>DS</sub> (ON)	$I_D = 0.6 A,  V_{GS} = 10 V$	_	1.7	3.0	V
Forward Transfer Admittance	Y <sub>fs</sub>	$V_{ m DS} = 10 \  m V, \ I_{ m D} = 0.3 \  m A$	_	0.7	_	S
Input Capacitance	$C_{iss}$	$V_{DS} = 10 \text{ V}, V_{GS} = 0,$ f = 1 MHz	_	170	_	· pF
Output Capacitance	$C_{OSS}$		_	45	_	
Reverse Transfer Capacitance	$\mathrm{C}_{\mathrm{rss}}$		_	17	_	

This transistor is the electrostatic sensitive device. Plese handle with caution.

#### 961001EAA2

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