# TOSHIBA FIELD EFFECT TRANSISTOR SILICON P CHANNEL MOS TYPE

# AUDIO FREQUENCY POWER AMPLIFIER APPLICATION

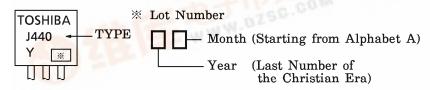
High Breakdown Voltage  $: V_{DSS} = -180V$ 

High Forward Transfer Admittance :  $|Y_{fs}| = 4.0S$  (Typ.)

# MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Drain-Source Voltage	$v_{ m DSS}$	-180	V
Gate-Source Voltage	$V_{GSS}$	±20	V
Drain Current	$I_{\mathrm{D}}$	-9	A
Power Dissipation (Tc=25°C)	$P_{\mathrm{D}}$	80	W
Channel Temperature	$\mathrm{T_{ch}}$	150	°C
Storage Temperature Range	$\mathbf{T_{stg}}$	<b>−55~1</b> 50	°C

### **MARKING**



## ELECTRICAL CHARACTERISTICS (Ta = 25°C)

Unit in mm
15.8±0.5
JEDEC —
EIAJ —
TOSHIBA 2-16F1B
Waight . F Om (True)

Weight: 5.8g (Typ.)

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CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Gate Leakage Current	$I_{GSS}$	$V_{DS} = 0, V_{GS} = \pm 20V$	_	_	±0.5	$\mu$ A
Drain-Source Breakdown Voltage	V (BR) DSS	$I_D = -10$ mA, $V_{GS} = 0$	-180	_	_	V
Gate-Source Cut-off Current	VGS (OFF) (Note)	$V_{DS} = -10V, I_D = -0.1A$	-1.4	_	-2.8	V
Drain-Source Saturation Voltage	V <sub>DS</sub> (ON)	$I_D = -6A, V_{GS} = -10V$	_	-1.5	-5.0	V
Forward Transfer Admittance	Y <sub>fs</sub>	$V_{DS} = -10V, I_D = -3A$	古我	4.0	ZSC	S
Input Capacitance	$\mathrm{c}_{\mathrm{iss}}$	$V_{DS} = -30V$ , $V_{GS} = 0$ , $f = 1MHz$		1300	_	pF
Output Capacitance	Coss	$V_{DS} = -30V, V_{GS} = 0, f = 1MHz$	_	350	_	pF
Reverse Transfer Capacitance	$C_{rss}$	$V_{DS} = -30V, V_{GS} = 0, f = 1MHz$	_	200	_	pF

 $Y: -1.4 \sim -2.8$ (Note): VGS (OFF) Classification

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

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