**TOSHIBA** 2SA1182

TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL (PCT PROCESS)

## 2 S A 1 1 8 2

AUDIO FREQUENCY LOW POWER AMPLIFIER APPLICATIONS DRIVER STAGE AMPLIFIER APPLICATIONS **SWITCHING APPLICATIONS** 

Excellent hFE Linearity

:  $h_{FE(2)} = 25$  (Min.) at  $V_{CE} = -6 V I_{C} = -400 mA$ 

Complementary to 2SC2859.

## MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{\mathrm{CBO}}$	-35	V
Collector-Emitter Voltage	VCEO	-30	V
Emitter-Base Voltage	$V_{\mathrm{EBO}}$	-5	V
Collector Current	$I_{\mathbf{C}}$	-500	mA
Base Current	I <sub>B</sub>	-50	mA
Collector Power Dissipation	PC	150	mW
Junction Temperature	$T_{j}$	125	°C
Storage Temperature Range	$\mathrm{T_{stg}}$	-55~125	$^{\circ}\mathrm{C}$

## Unit in mm BASE **EMITTER** COLLECTOR S-MINI **JEDEC** TO-236 MOD SC-59 **EIAJ** TOSHIBA 2-3F1A

Weight: 0.012 g

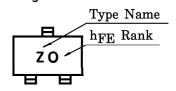
## ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	ICBO	$V_{CB} = -35 \text{ V}, I_{E} = 0$	_	_	-0.1	$\mu$ <b>A</b>
Emitter Cut-off Current	$I_{EBO}$	$V_{EB} = -5 V, I_{C} = 0$	_		-0.1	$\mu$ A
IDC Current Gain (Note)	hFE (1)	$V_{CE} = -1  V,  I_{C} = -100  mA$	70	_	240	
	h <sub>FE (2)</sub>	$V_{CE} = -6  V,  I_{C} = -400  mA$	25	_	_	
Collector-Emitter	V <sub>CE</sub> (sat)	$I_{\rm C} = -100{\rm mA},\ I_{\rm B} = -10{\rm mA}$	_	-0.1	-0.25	V
Saturation Voltage						
Base-Emitter Voltage	$ m V_{BE}$	$V_{CE} = -1  V,  I_{C} = -100  mA$	_	-0.8	-1.0	V
Transition Frequency	$ m f_{T}$	$V_{CE} = -6  V,  I_{C} = -20  mA$	_	200	_	MHz
Collector Output Capacitance	$C_{ m ob}$	$V_{CB} = -6 V$ , $I_{E} = 0$ , $f = 1 MHz$	_	13	_	рF

(Note): hFE(1) Classification  $O: 70\sim140, Y: 120\sim240$ 

O: 25 (Min.) Y: 40 (Min.) h<sub>FE</sub> (2) Classification

Marking



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