## **ISA1284AS1**

FOR LOW FREQUENCY POWOR AMPLIFY APPLICATION SILICON PNP EPITAXIAL TYPE

## **DESCRIPTION**

ISA1284AS1 is a silicon PNP epitaxial type transistor designed for high voltage application.

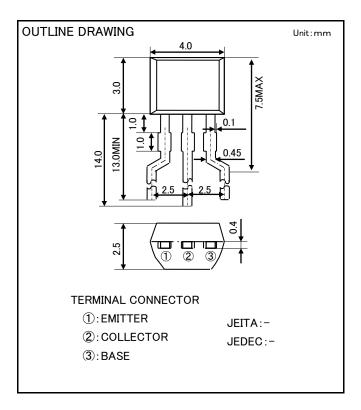
Complementary with ISC3244AS1.

## **FEATURE**

- High voltage V<sub>CEO</sub>=-100V
- High peak collector current. I<sub>CM</sub>=-800mA
- High gain band width product. fT=130MHz (typ)
- High collector dissipation. Pc=600mW

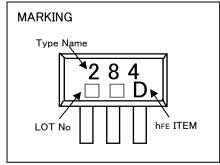
## **APPLICATION**

For 20~40W amp complementary drive, relay drive, power supply application.



### MAXIMUM RATINGS (Ta=25°C)

Symbol	Parameter	Ratings	Unit
Vсво	Collector to Base voltage	-100	V
V <sub>EBO</sub>	Emitter to Base voltage	ase voltage -5	
Vceo	Collector to Emitter voltage	-100	٧
$I_{C}$	Collector current	-500	mA
$I_{CM}$	Peak collector current	-800	mA
Pc	Collector dissipation	600	mW
$T_{j}$	Junction temperature	+150	οຶ
$T_{stg}$	Storage temperature	mperature −55 <b>~</b> +150	



## ELECTRICAL CHARACTERISTICS (Ta=25°C)

Symbol		Test conditions		Limits		
	Parameter		Min	Тур	Max	Unit
V <sub>(BR)CBO</sub>	C to B breakdown voltage	I <sub>C</sub> =-10 μ A , I <sub>E</sub> =0mA	-100	_	_	٧
$V_{(BR)EBO}$	E to B breakdown voltage	$I_E$ =-10 $\mu$ A , $I_C$ =0mA	-5	-	-	٧
$V_{(BR)CEO}$	C to E breakdown voltage	I <sub>C</sub> =−1mA , R <sub>BE</sub> =∞	-100	-	-	V
I <sub>CBO</sub>	Collector cut off current	V <sub>CB</sub> =-50V , I <sub>E</sub> =0mA	-	-	-0.5	μΑ
$\mathbf{I}_{EBO}$	Emitter cut off current	$V_{EB}$ =-2V , $I_{C}$ =0mA	-	-	-0.5	μΑ
h <sub>FE</sub> ※	DC forward current gain	V <sub>CE</sub> =-10V , I <sub>C</sub> =-10mA	55	_	300	-
$V_{\text{CE}(\text{sat})}$	C to E Saturation Voltage	I <sub>C</sub> =-150mA , I <sub>B</sub> =-15mA	-	-0.15	-0.5	٧
fT	Gain band width product	V <sub>CE</sub> =-10V , I <sub>E</sub> =10mA	-	130	_	MHz
Cob	Collector output capacitance	V <sub>CB</sub> =-10V , I <sub>E</sub> =0mA , f=1MHz	_	11	-	pF

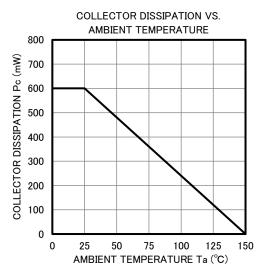
※) It shows hFE classification in right table.

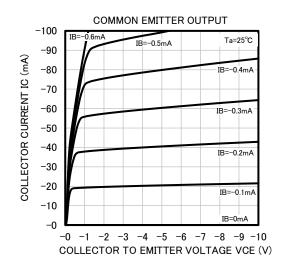
Item	С	D	E
hFE	50 <b>~</b> 110	90~180	150~300

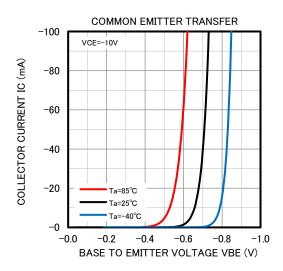
## **ISA1284AS1**

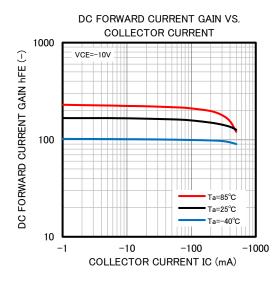
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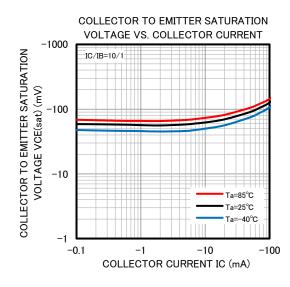
### TYPICAL CHARACTERISTICS

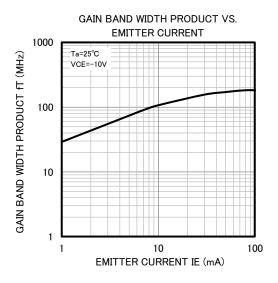






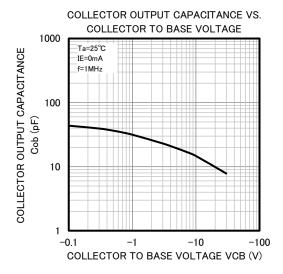


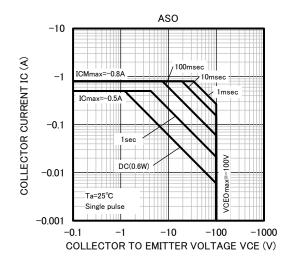




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