

ISA1284AS1

FOR LOW FREQUENCY POWER AMPLIFY APPLICATION
SILICON PNP EPITAXIAL TYPE

DESCRIPTION

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

Complementary with ISC3244AS1.

FEATURE

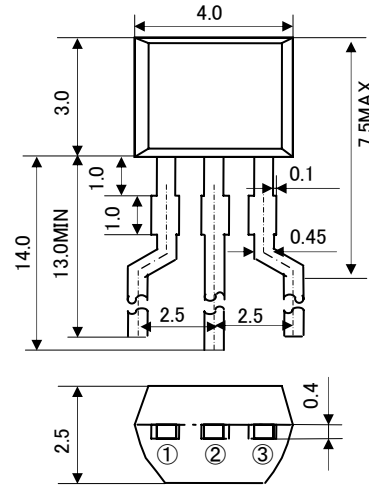
- High voltage $V_{CE0} = -100V$
- High peak collector current. $I_{CM} = -800mA$
- High gain band width product. $fT = 130MHz$ (typ)
- High collector dissipation. $P_c = 600mW$

APPLICATION

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

OUTLINE DRAWING

Unit: mm



JEITA:
JEDEC:

TERMINAL CONNECTER

- ①: EMITTER
- ②: COLLECTOR
- ③: BASE

MAXIMUM RATINGS ($T_a = 25^\circ C$)

Symbol	Parameter	Ratings	Unit
V_{CBO}	Collector to Base voltage	-100	V
V_{EBO}	Emitter to Base voltage	-5	V
V_{CEO}	Collector to Emitter voltage	-100	V
I_C	Collector current	-500	mA
I_{CM}	Peak collector current	-800	mA
P_c	Collector dissipation	600	mW
T_j	Junction temperature	+150	$^\circ C$
T_{stg}	Storage temperature	-55~+150	$^\circ C$

ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ C$)

Parameter	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
$V_{(BR)CBO}$	C to B break down voltage	$I_C = -10 \mu A, I_E = 0mA$	-100	-	-	V
$V_{(BR)EBO}$	E to B break down voltage	$I_E = -10 \mu A, I_C = 0mA$	-5	-	-	V
$V_{(BR)CEO}$	C to E break down voltage	$I_C = -1mA, R_{BE} = \infty$	-100	-	-	V
I_{CBO}	Collector cut off current	$V_{CB} = -50V, I_E = 0mA$	-	-	-0.5	μA
I_{EBO}	Emitter cut off current	$V_{EB} = -2V, I_C = 0mA$	-	-	-0.5	μA
hFE※	DC forward current gain	$V_{CE} = -10V, I_C = -10mA$	55	-	300	-
$V_{CE(sat)}$	C to E Saturation Voltage	$I_C = -150mA, I_B = -15mA$	-	-0.15	-0.5	V
fT	Gain band width product	$V_{CE} = -10V, I_E = 10mA$	-	130	-	MHz
Cob	Collector output capacitance	$V_{CB} = -10V, I_E = 0mA, f = 1MHz$	-	11	-	pF

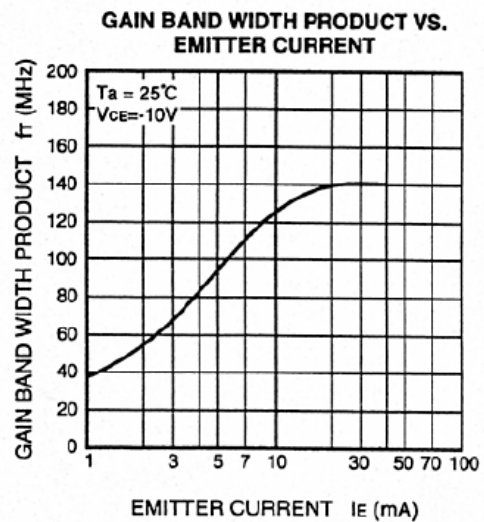
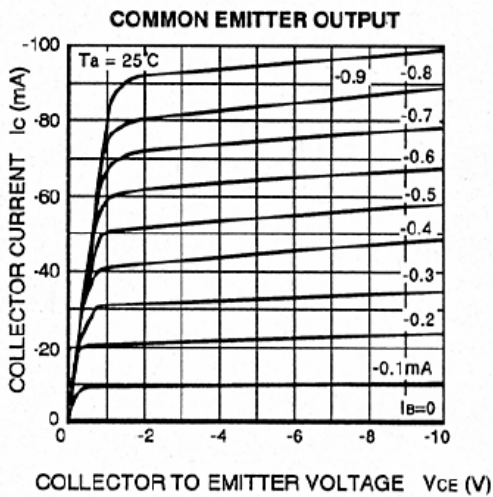
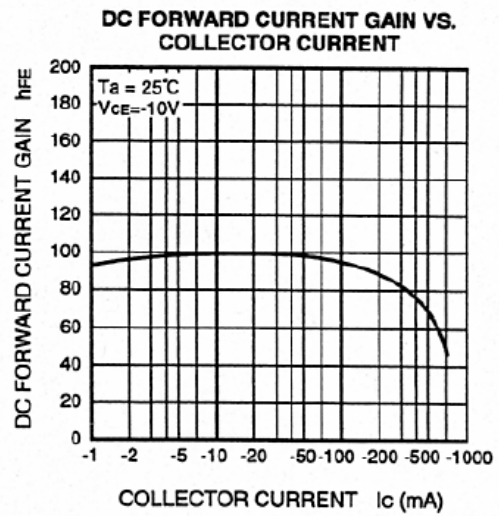
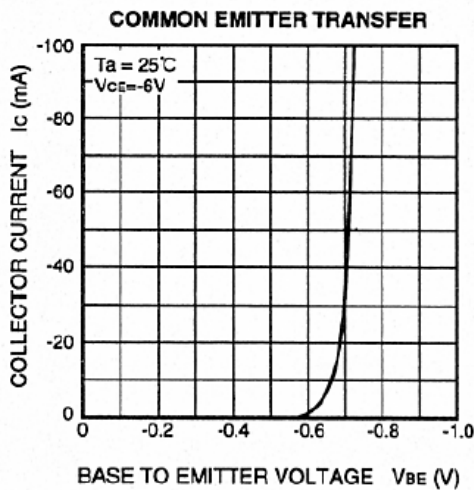
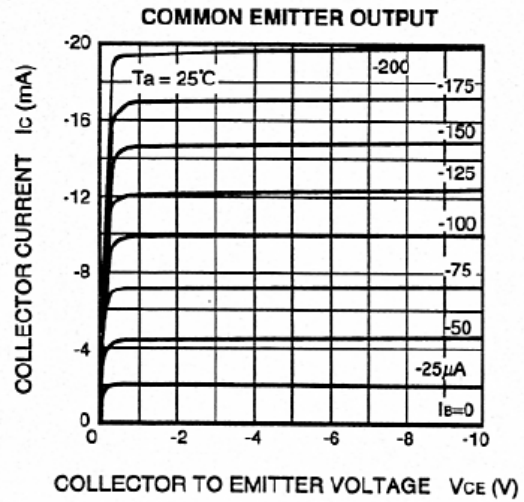
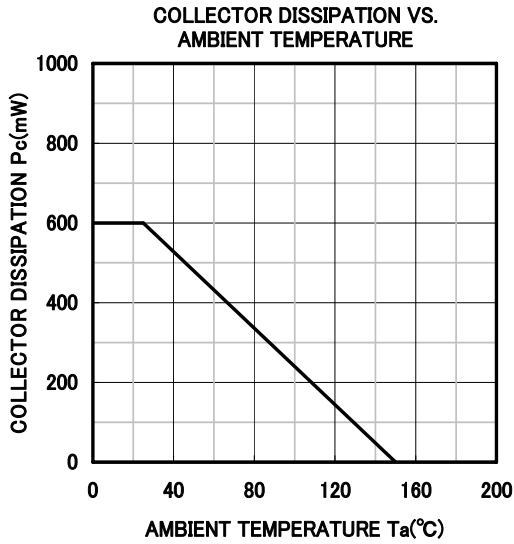
※) It shows hFE classification in right table.

Item	C	D	E
hFE item	50~110	90~180	150~300

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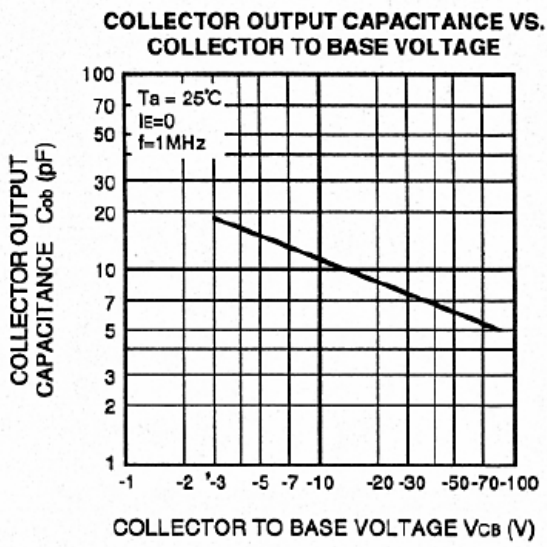
TYPICAL CHARACTERISTICS



<SMALL-SIGNAL TRANSISTOR>

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