

ISC3244AS1

FOR LOW FREQUENCY POWER AMPLIFY APPLICATION
SILICON NPN EPITAXIAL TYPE

DESCRIPTION

ISC3244AS1 is a silicon NPN epitaxial type transistor designed with high collector dissipation, high voltage.

Complementary with ISA1284AS1.

FEATURE

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

APPLICATION

Drive for 20 to 40W amplifier, relay drive, power supply application.

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 ($T_a=25^{\circ}C$)

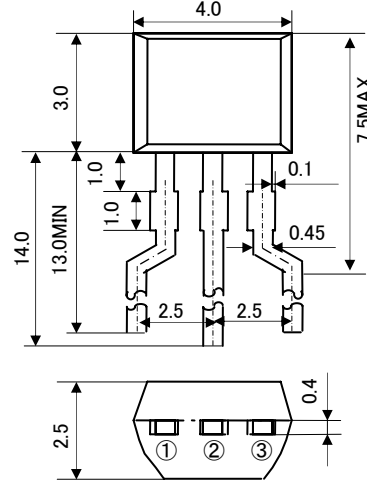
Parameter	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
$V_{(BR)CBO}$	C to B break down voltage	$I_C=10\mu A, I_E=0mA$	100	-	-	V
$V_{(BR)EBO}$	E to B break down voltage	$I_E=10\mu A, I_C=0mA$	5	-	-	V
$V_{(BR)CEO}$	C to E break down voltage	$I_C=1mA, R_{BE}=\infty$	100	-	-	V
I_{CBO}	Collector 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
$hFE_{\times}$	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
f_T	Gain band width product	$V_{CE}=10V, I_E=-10mA$	-	130	-	MHz
C_{ob}	Collector output capacitance	$V_{CB}=10V, I_E=0mA, f=1MHz$	-	6.5	-	pF

※) It shows hFE classification in right table.

Item	C	D	E
hFE item	55~110	90~180	150~300

OUTLINE DRAWING

Unit:mm



JEITA:
JEDEC:

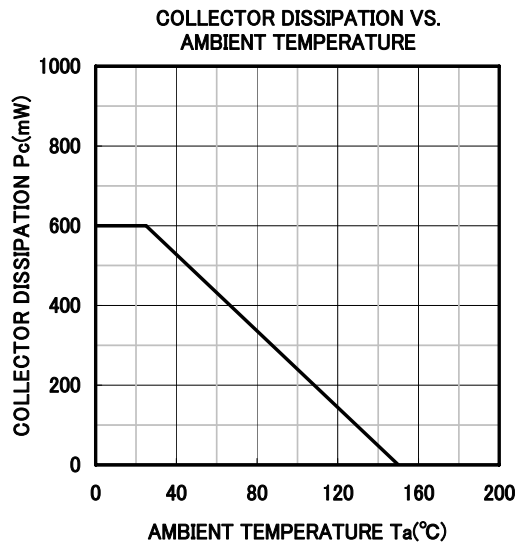
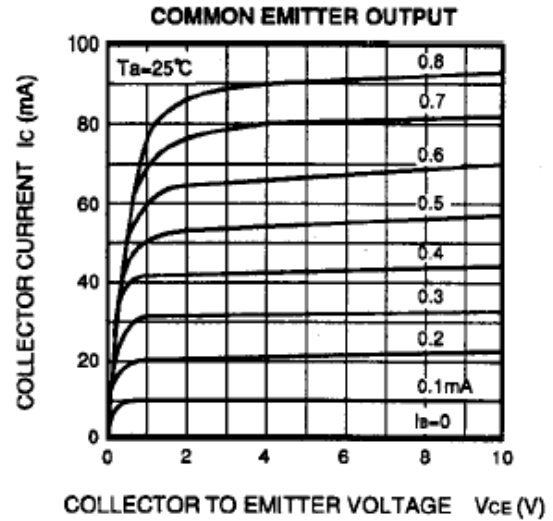
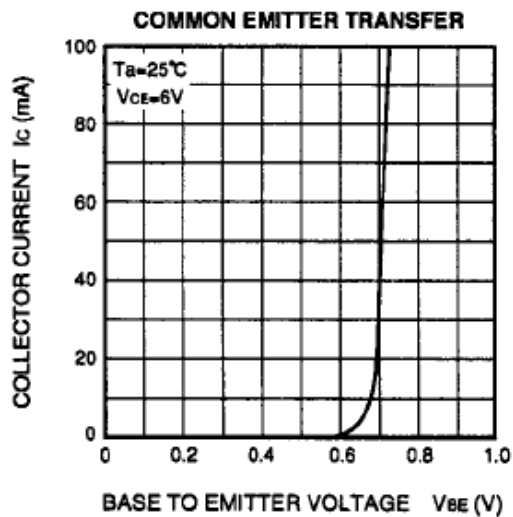
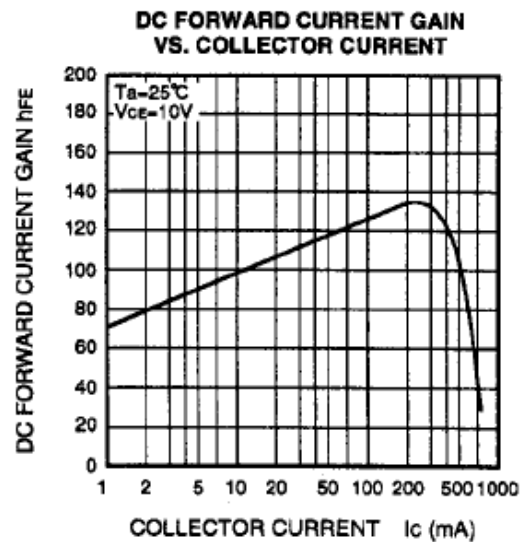
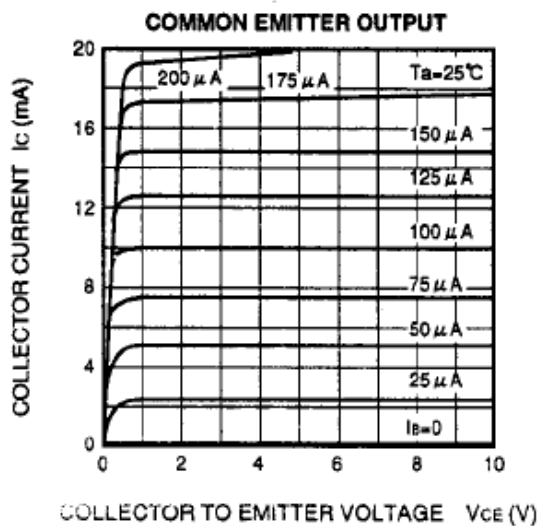
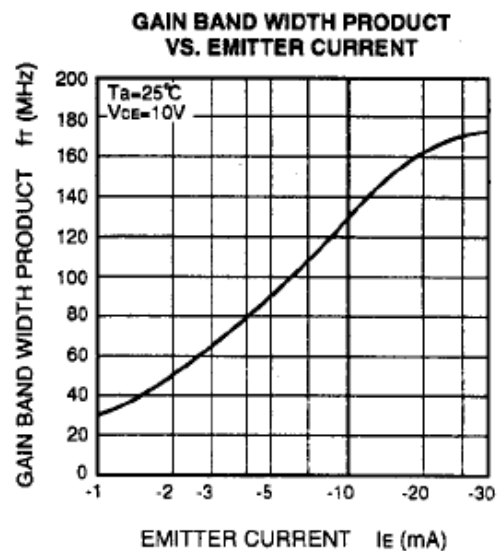
TERMINAL CONNECTER

- ①: EMITTER
- ②: COLLECTOR
- ③: BASE

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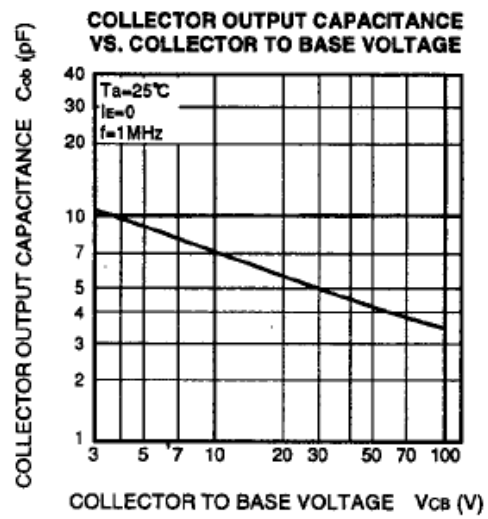
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TYPICAL CHARACTERISTICS



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SILICON NPN EPITAXIAL TYPE





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